UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended September 30, 2022 or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from ____________________ to __________

Commission File Number 1-36117

inTEST Corporation
(Exact Name of Registrant as Specified in its Charter)

Delaware	**22-2370659**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

804 East Gate Drive, Suite 200
Mt. Laurel, New Jersey 08054
(Address of principal executive offices, including zip code)

(856) 505-8800
(Registrant's Telephone Number, including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Common Stock, par value $0.01 per share	INTT	NYSE American

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☒	Smaller reporting company ☒
Emerging growth company ☐	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes ☐ No ☒

Number of shares of Common Stock, $0.01 par value, outstanding as of the close of business on October 31, 2022: 11,022,949

inTEST CORPORATION

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PART I. FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

inTEST CORPORATION
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share data)

	September 30, 2022 (Unaudited)	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 8,901	$ 21,195
Restricted cash	1,137	-
Short term investments	3,494	-
Trade accounts receivable, net of allowance for doubtful accounts of $209 and $213, respectively	21,134	16,536
Inventories	21,092	12,863
Prepaid expenses and other current assets	1,871	1,483
Total current assets	57,629	52,077
Property and equipment:		
Machinery and equipment	6,334	5,733
Leasehold improvements	3,217	3,001
Gross property and equipment	9,551	8,734
Less: accumulated depreciation	(6,482)	(6,046)
Net property and equipment	3,069	2,688
Right-of-use assets, net	5,017	5,919
Goodwill	21,394	21,448
Intangible assets, net	18,894	21,634
Restricted certificates of deposit	100	100
Other assets	598	39
Total assets	$ 106,701	$ 103,905
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of Term Note	$ 4,100	$ 4,100
Current portion of operating lease liabilities	1,430	1,371
Accounts payable	8,183	4,281
Accrued wages and benefits	3,537	4,080
Accrued professional fees	886	1,048
Customer deposits and deferred revenue	5,077	6,038
Accrued sales commissions	1,164	863
Domestic and foreign income taxes payable	1,335	2,024
Other current liabilities	1,386	1,267
Total current liabilities	27,098	25,072
Operating lease liabilities, net of current portion	4,196	5,248
Term Note, net of current portion	13,067	16,000
Deferred tax liabilities	217	1,379
Contingent consideration	1,238	930
Other liabilities	464	453
Total liabilities	46,280	49,082
Commitments and Contingencies		
Stockholders' equity:		
Preferred stock, $0.01 par value; 5,000,000 shares authorized; no shares issued or outstanding	-	-
Common stock, $0.01 par value; 20,000,000 shares authorized; 11,057,858 and 10,910,460 shares issued, respectively	111	109
Additional paid-in capital	31,516	29,931
Retained earnings	29,610	24,393
Accumulated other comprehensive earnings (loss)	(602)	594
Treasury stock, at cost; 34,308 and 33,077 shares, respectively	(214)	(204)
Total stockholders' equity	60,421	54,823
Total liabilities and stockholders' equity	$ 106,701	$ 103,905

See accompanying Notes to Consolidated Financial Statements.

inTEST CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except share and per share data)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue	$ 30,771	$ 21,144	$ 84,423	$ 62,520
Cost of revenue	16,873	10,749	45,964	31,642
Gross profit	13,898	10,395	38,459	30,878
Operating expenses:				
Selling expense	4,009	2,841	11,498	7,849
Engineering and product development expense	1,866	1,334	5,649	4,012
General and administrative expense	4,864	3,620	14,623	10,550
Restructuring and other charges	-	51	-	303
Total operating expenses	10,739	7,846	31,770	22,714
Operating income	3,159	2,549	6,689	8,164
Other income (expense)	(120)	(17)	(425)	2
Earnings before income tax expense	3,039	2,532	6,264	8,166
Income tax expense	515	357	1,047	1,170
Net earnings	$ 2,524	$ 2,175	$ 5,217	$ 6,996
Earnings per common share - basic	$ 0.24	$ 0.21	$ 0.49	$ 0.67
Weighted average common shares outstanding - basic	10,695,867	10,496,188	10,655,469	10,422,851
Earnings per common share - diluted	$ 0.23	$ 0.20	$ 0.48	$ 0.65
Weighted average common shares and common share equivalents outstanding - diluted	10,864,540	10,792,290	10,840,644	10,694,351

See accompanying Notes to Consolidated Financial Statements.

inTEST CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS
(In thousands)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	**2021**	**2022**	**2020**
Net earnings	$ 2,524	$ 2,175	$ 5,217	$ 6,996
Unrealized gain on interest rate swap agreement	169	-	578	-
Foreign currency translation adjustments	(935)	(68)	(1,774)	(145)
Comprehensive earnings	$ 1,758	$ 2,107	$ 4,021	$ 6,851

See accompanying Notes to Consolidated Financial Statements

inTEST CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands, except share data)
(Unaudited)

	Nine Months Ended September 30, 2022						
	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Earnings (loss)	Treasury Stock	Total Stockholders' Equity
	Shares	Amount					
Balance, January 1, 2022	10,910,460	$ 109	$ 29,931	$ 24,393	$ 594	$ (204)	$ 54,823
Net earnings	-	-	-	577	-	-	577
Other comprehensive earnings	-	-	-	-	173	-	173
Amortization of deferred compensation related to stock-based awards	-	-	372	-	-	-	372
Issuance of unvested shares of restricted stock	79,489	1	(1)	-	-	-	-
Shares issued under Employee Stock Purchase Plan	5,245	-	56	-	-	-	56
Balance, March 31, 2022	10,995,194	110	30,358	24,970	767	(204)	56,001
Net earnings	-	-	-	2,116	-	-	2,116
Other comprehensive loss	-	-	-	-	(603)	-	(603)
Amortization of deferred compensation related to stock-based awards	-	-	551	-	-	-	551
Issuance of unvested shares of restricted stock	44,044	-	-	-	-	-	-
Shares redeemed into treasury stock	-	-	-	-	-	(10)	(10)
Shares issued under Employee Stock Purchase Plan	9,470	-	65	-	-	-	65
Balance, June 30, 2022	11,048,708	110	30,974	27,086	164	(214)	58,120
Net earnings	-	-	-	2,524	-	-	2,524
Other comprehensive loss	-	-	-	-	(766)	-	(766)
Amortization of deferred compensation related to stock-based awards	-	-	450	-	-	-	450
Forfeiture of unvested shares of restricted stock	(5,944)	-	-	-	-	-	-
Stock options exercised	8,060	-	38	-	-		38
Shares issued under Employee Stock Purchase Plan	7,034	1	54	-	-	-	55
Balance, September 30, 2022	11,057,858	$ 111	$ 31,516	$ 29,610	$ (602)	$ (214)	$ 60,421

	Nine Months Ended September 30, 2021						
	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Earnings	Treasury Stock	Total Stockholders' Equity
	Shares	Amount					
Balance, January 1, 2021	10,562,200	$ 106	$ 26,851	$ 17,110	$ 889	$ (204)	$ 44,752
Net earnings	-	-	-	2,212	-	-	2,212
Other comprehensive loss	-	-	-	-	(101)	-	(101)
Amortization of deferred compensation related to stock-based awards	-	-	269	-	-	-	269
Issuance of unvested shares of restricted stock	81,468	1	(1)	-	-	-	-
Stock options exercised	99,740	1	716	-	-	-	717
Balance, March 31, 2021	10,743,408	108	27,835	19,322	788	(204)	47,849
Net earnings	-	-	-	2,609	-	-	2,609
Other comprehensive earnings	-	-	-	-	24	-	24
Amortization of deferred compensation related to stock-based awards	-	-	454	-	-	-	454
Issuance of unvested shares of restricted stock	44,741	-	-	-	-	-	-
Forfeiture of unvested shares of restricted stock	(18,125)	-	-	-	-	-	-
Stock options exercised	45,835	-	285	-	-	-	285
Balance, June 30, 2021	10,815,859	108	28,574	21,931	812	(204)	51,221
Net earnings	-	-	-	2,175	-	-	2,175
Other comprehensive loss	-	-	-	-	(68)	-	(68)
Amortization of deferred compensation related to stock-based awards	-	-	371	-	-	-	371
Stock options exercised	3,435	-	17	-	-	-	17
Balance, September 30, 2021	10,819,294	$ 108	$ 28,962	$ 24,106	$ 744	$ (204)	$ 53,716

See accompanying Notes to Consolidated Financial Statements

inTEST CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Net earnings	$ 5,217	$ 6,996
Adjustments to reconcile net earnings to net cash provided by (used in) operating activities:		
Depreciation and amortization	3,674	2,166
Provision for excess and obsolete inventory	307	154
Foreign exchange loss	107	36
Amortization of deferred compensation related to stock-based awards	1,373	1,094
Discount on shares sold under Employee Stock Purchase Plan	28	-
Loss on disposal of property and equipment	45	20
Deferred income tax benefit	(1,162)	(221)
Changes in assets and liabilities:		
Trade accounts receivable	(4,900)	(3,874)
Inventories	(8,549)	(2,051)
Prepaid expenses and other current assets	(907)	(26)
Restricted certificates of deposit	-	40
Other assets	(1)	(10)
Operating lease liabilities	(1,064)	(918)
Accounts payable	3,947	1,425
Accrued wages and benefits	(527)	942
Accrued professional fees	(153)	52
Customer deposits and deferred revenue	(827)	1,697
Accrued sales commissions	310	366
Domestic and foreign income taxes payable	(672)	302
Other current liabilities	35	(60)
Other liabilities	61	(7)
Net cash provided by (used in) operating activities	(3,658)	8,123
CASH FLOWS FROM INVESTING ACTIVITIES		
Refund of final working capital adjustment related to Acculogic	371	-
Purchase of property and equipment	(1,043)	(577)
Purchase of short-term investments	(3,494)	-
Net cash used in investing activities	(4,166)	(577)
CASH FLOWS FROM FINANCING ACTIVITIES		
Repayments of Term Note	(2,933)	-
Proceeds from stock options exercised	38	1,019
Proceeds from shares sold under Employee Stock Purchase Plan	148	-
Shares redeemed into treasury stock	(10)	-
Net cash provided by (used in) financing activities	(2,757)	1,019
Effects of exchange rates on cash	(576)	(99)
Net cash provided by (used in) all activities	(11,157)	8,466
Cash, cash equivalents and restricted cash at beginning of period	21,195	10,277
Cash, cash equivalents and restricted cash at end of period	$ 10,038	$ 18,743
Cash payments for:		
Domestic and foreign income taxes	$ 2,926	$ 1,053
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING ACTIVITIES:		
Adjustments to preliminary purchase accounting for Acculogic (Note 3)		
Decrease in fair value of assets acquired	$ (371)	
Increase in liability for contingent consideration	$ 500	
Increase in fair value of intangible assets	$ (49)	
Increase in goodwill	$ (451)	

See accompanying Notes to Consolidated Financial Statements.

(1) NATURE OF OPERATIONS

We are a global supplier of innovative test and process solutions for use in manufacturing and testing across a wide range of markets including automotive, defense/aerospace, industrial, life sciences, security and semiconductor. During the year ended December 31, 2021, we managed our business as two operating segments which were also our reportable segments and reporting units: Thermal Products ("Thermal") and Electromechanical Solutions ("EMS"). As discussed further in Note 16, effective January 1, 2022, we reorganized our operating segments. Accordingly, for 2022, we have three operating segments which are also our reportable segments and reporting units: Electronic Test, Environmental Technologies and Process Technologies. Prior period information has been reclassified to be comparable to the current period's presentation.

The consolidated entity is comprised of inTEST Corporation and our wholly-owned subsidiaries. We manufacture our products in the U.S., Canada and the Netherlands. Marketing and support activities are conducted worldwide from our facilities in the U.S., Canada, Germany, Singapore, the Netherlands and the U.K. We operate our business worldwide and sell our products both domestically and internationally.

All of our operating segments have multiple products that we design, manufacture and market to our customers. Due to a number of factors, our products have varying levels of gross margin. The mix of products we sell in any period is ultimately determined by our customers' needs. Therefore, the mix of products sold in any given period can change significantly from the prior period. In addition, we sell our products to a variety of different types of customers with varying levels of discounts and commission expense. As a result of changes in both the mix of products sold as well as customer mix in any given period, our consolidated gross margin can vary significantly from period to period.

The semiconductor market ("semi" or the "semi market") which includes both the broader semiconductor market, as well as the more specialized automated test equipment ("ATE") and wafer production sectors within the broader semiconductor market, has historically been the largest single market in which we operate. The semi market is characterized by rapid technological change, competitive pricing pressures and cyclical as well as seasonal market patterns. The semi market is also subject to periods of significant expansion or contraction in demand. In addition to the semi market, we sell into a variety of other markets. Our intention is to continue diversifying our markets, our product offerings within the markets we serve and our customer base across all of our markets with the goal of reducing our dependence on any one market, product or customer. In particular, we are seeking to reduce the impact of volatility in the semi market on our results of operations.

Our Electronic Test segment sells its products to semiconductor manufacturers and third-party test and assembly houses (end user sales) and to ATE manufacturers (original equipment manufacturer ("OEM") sales), who ultimately resell our equipment with theirs to both semiconductor manufacturers and third-party test and assembly houses. These sales all fall within the ATE sector of the semi market. With the acquisition of Acculogic in December 2021, our Electronic Test segment also sells its products to customers in markets outside the semi market including the automotive, defense/aerospace, industrial and life sciences markets. Our Environmental Technologies segment sells its products to end users and OEMs within the ATE sector of the semi market. It also sells its products to customers in a variety of other markets other than the semi market, including the automotive, defense/aerospace, industrial and life sciences markets. Our Process Technologies segment sells its products to customers in the wafer production sector within the semi market. It also sells its products to customers in a variety of other markets other than the semi market, including the automotive, defense/aerospace, industrial, life sciences and security markets.

Our financial results are affected by a wide variety of factors, including, but not limited to, general economic conditions worldwide and in the markets in which we operate, economic conditions specific to the semi market and the other markets we serve, downward pricing pressures from customers, our reliance on a relatively few number of customers for a significant portion of our sales and our ability to safeguard patented technology and intellectual property in a rapidly evolving market. In addition, we are exposed to the risk of obsolescence of our inventory depending on the mix of future business and technological changes within the markets that we serve. Part of our strategy for growth includes potential acquisitions that may cause us to incur substantial expense in reviewing and evaluating potential transactions. We may or may not be successful in locating suitable businesses to acquire and in closing acquisitions of businesses we pursue. In addition, we may not be able to successfully integrate any business we do acquire with our existing business and we may not be able to operate the acquired business profitably. As a result of these or other factors, we may experience significant period-to-period fluctuations in future operating results.

COVID-19 Pandemic

With respect to the COVID-19 pandemic, we are following the guidance of the Centers for Disease Control and Prevention ("CDC") and the local regulatory authorities in regions outside the U.S. While in most cases we are no longer requiring employees to wear masks indoors in our domestic locations, we continue to closely monitor the case numbers in individual facilities and have temporarily reinstituted mask requirements when we have deemed it prudent to do so. We are encouraging all employees to receive COVID-19 vaccinations and boosters, if possible. We are continuing to conduct temperature screenings and encouraging all employees to maintain social distancing when appropriate. We are also continuing to allow employees to work remotely either part-time or full-time in circumstances when possible. During April 2022, an increase in COVID-19 cases at one of our facilities resulted in a loss of production time. Additionally, the shutdowns in China required us to find alternate plans for delivery of our products to the country. Although we were able to take actions to lessen the impact of these events on our business, if the spread of COVID-19 or its variants continues to worsen, we may experience additional lost production time or further interruption in our ability to ship our products to our customers. In addition, if one or more of our significant customers or suppliers is impacted, or if significant additional governmental regulations and restrictions are imposed, our business could be negatively impacted in the future. We continue to monitor the situation closely and will adjust our operations as necessary to protect the health and well-being of our employees and to minimize the impact on our business operations. To the extent that further governmental mandates or restrictions are implemented in the future, we currently expect to be able to continue to operate our business in a manner similar to how we have operated over the past two years.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Use of Estimates

The accompanying consolidated financial statements include our accounts and those of our wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated upon consolidation. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Certain of our accounts, including contingent consideration, inventories, long-lived assets, goodwill, identifiable intangibles and deferred tax assets and liabilities, including related valuation allowances, are particularly impacted by estimates.

In the opinion of management, the accompanying unaudited consolidated financial statements include all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the financial position, results of operations, and changes in cash flows for the interim periods presented. Certain footnote information has been condensed or omitted from these consolidated financial statements. Therefore, these consolidated financial statements should be read in conjunction with the consolidated financial statements and accompanying footnotes included in our Form 10-K for the year ended December 31, 2021 (the "2021 Form 10-K") filed on March 23, 2022 with the Securities and Exchange Commission.

Reclassification

Certain prior period amounts have been reclassified to be comparable with the current period's presentation.

Subsequent Events

We have made an assessment of our operations and determined that there were no material subsequent events requiring adjustment to, or disclosure in, our consolidated financial statements for the nine months ended September 30, 2022.

Business Combinations

Acquired businesses are accounted for using the purchase method of accounting, which requires that the purchase price be allocated to the net assets acquired at their respective fair values. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill. Fair values of intangible assets are estimated by valuation models prepared by our management and third-party advisors. The assets purchased and liabilities assumed have been reflected in our consolidated balance sheets, and the operating results are included in the consolidated statements of operations and consolidated statements of cash flows from the date of acquisition. Any change in the fair value of acquisition-related contingent consideration subsequent to the acquisition date, including changes from events after the acquisition date, will be recognized in the consolidated statement of operations in the period of the estimated fair value change. Acquisition-related transaction costs, including legal and accounting fees and other external costs directly related to the acquisition, are recognized separately from the acquisition and expensed as incurred in general and administrative expense in the consolidated statements of operations.

Cash, Cash Equivalents and Restricted Cash

Short-term investments that have maturities of three months or less when purchased are considered to be cash equivalents and are carried at cost, which approximates fair value. Our cash balances, which are deposited with highly reputable financial institutions, at times may exceed the federally insured limits. We have not experienced any losses related to these cash balances and believe the credit risk to be minimal.

Restricted cash represents amounts deposited at our bank in the Netherlands to support a bank guarantee which one of the customers of our induction heating products required as a condition of paying a deposit on a large order they placed with us in 2022. The amount of the deposit, and, accordingly, the guarantee, was EUR 1,160. At September 30, 2022 this amount was $1,137. The related order is Euro denominated.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the consolidated balance sheets and the consolidated statements of cash flows:

	September 30, 2022	December 31, 2021
Cash and cash equivalents	$ 8,901	$ 21,195
Restricted cash	1,137	-
Total cash, cash equivalents and restricted cash	$ 10,038	$ 21,195

Short-term Investments

Our short-term investments consist of investments in U.S. treasury bills with original maturities of six months. We account for these investments in accordance with Accounting Standards Codification ("ASC") Topic 320 (Investments – Debt and Equity Securities). These investments have been classified as held-to-maturity. Held-to-maturity investment securities are financial instruments for which we have both the intent and the ability to hold them to maturity. Held-to-maturity securities are reported at the investment's amortized cost as of the reporting date. See Note 4 for additional disclosures related to our short-term investments.

Fair Value of Financial Instruments

Our financial instruments include cash and cash equivalents, short-term investments, accounts receivable, accounts payable, accrued expenses, our credit facility, interest rate swaps and our liabilities for contingent consideration. Our cash and cash equivalents, accounts receivable, accounts payable and accrued expenses are carried at cost which approximates fair value, due to the short maturities of the accounts. Our short-term investments are classified as held-to-maturity and carried at amortized cost. Our credit facility and our interest rate swap are discussed further below and in Note 12. Our liabilities for contingent consideration are accounted for in accordance with the guidance in ASC Topic 820 (Fair Value Measurement). ASC Topic 820 establishes a fair value hierarchy for instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and our own assumptions (unobservable inputs). Our contingent consideration liabilities are measured at fair value on a recurring basis using Level 3 inputs which are inputs that are unobservable and significant to the overall fair value measurement. These unobservable inputs reflect our assumptions about the inputs that market participants would use in pricing the asset or liability and are developed based on the best information available in the circumstances. See Note 5 for further disclosures related to the fair value of our liabilities for contingent consideration.

Goodwill, Intangible and Long-Lived Assets

As discussed in Notes 1 and 16, during the year ended December 31, 2021, we managed our business as two operating segments which were also our reportable segments and reporting units: Thermal and EMS. Effective January 1, 2022, we reorganized our operating segments. Accordingly, for 2022, we have three operating segments which are also our reportable segments and reporting units: Electronic Test, Environmental Technologies and Process Technologies.

We account for goodwill and intangible assets in accordance with ASC Topic 350 (Intangibles - Goodwill and Other). Finite-lived intangible assets are amortized over their estimated useful economic life and are carried at cost less accumulated amortization. Goodwill is assessed for impairment annually at the beginning of the fourth quarter on a reporting unit basis, or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. Goodwill is considered to be impaired if the fair value of a reporting unit is less than its carrying amount. As a part of the goodwill impairment assessment, we have the option to perform a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If, as a result of our qualitative assessment, we determine that it is more-likely-than-not that the fair value of the reporting unit is greater than its carrying amount, a quantitative goodwill impairment test is not required. However, if, as a result of our qualitative assessment, we determine it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, or, if we choose not to perform a qualitative assessment, we are required to perform a quantitative goodwill impairment test to identify potential goodwill impairment and measure the amount of goodwill impairment loss to be recognized.

The quantitative goodwill impairment test compares the fair value of a reporting unit with its carrying amount, including goodwill. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss will be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. The goodwill impairment assessment is based upon the income approach, which estimates the fair value of our reporting units based upon a discounted cash flow approach. This fair value is then reconciled to our market capitalization at year end with an appropriate control premium. The determination of the fair value of our reporting units requires management to make significant estimates and assumptions including the selection of control premiums, discount rates, terminal growth rates, forecasts of revenue and expense growth rates, income tax rates, changes in working capital, depreciation, amortization and capital expenditures. Changes in assumptions concerning future financial results or other underlying assumptions could have a significant impact on either the fair value of the reporting unit or the amount of the goodwill impairment charge.

Indefinite-lived intangible assets are assessed for impairment annually at the beginning of the fourth quarter, or more frequently if events or changes in circumstances indicate that the asset might be impaired. As a part of the impairment assessment, we have the option to perform a qualitative assessment to determine whether it is more likely than not that an indefinite-lived intangible asset is impaired. If, as a result of our qualitative assessment, we determine that it is more-likely-than-not that the fair value of the indefinite-lived intangible asset is less than its carrying amount, the quantitative impairment test is required; otherwise, no further testing is required. The quantitative impairment test consists of a comparison of the fair value of the intangible asset with its carrying amount. If the carrying amount of the intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess.

Long-lived assets, which consist of finite-lived intangible assets, property and equipment and right-of-use (“ROU”) assets, are assessed for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the estimated undiscounted cash flows to the recorded value of the asset. If impairment is indicated, the asset is written down to its estimated fair value. The cash flow estimates used to determine the impairment, if any, contain management's best estimates using appropriate assumptions and projections at that time.

Revenue Recognition

We recognize revenue in accordance with the guidance in ASC Topic 606 (Revenue from Contracts with Customers). We recognize revenue for the sale of products or services when our performance obligations under the terms of a contract with a customer are satisfied and control of the product or service has been transferred to the customer. Generally, this occurs when we ship a product or perform a service. In certain cases, recognition of revenue is deferred until the product is received by the customer or at some other point in the future when we have determined that we have satisfied our performance obligations under the contract. Our contracts with customers may include a combination of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. In addition to the sale of products and services, we also lease certain of our equipment to customers under short-term lease agreements. We recognize revenue from equipment leases on a straight-line basis over the lease term.

Revenue is recorded in an amount that reflects the consideration we expect to receive in exchange for those products or services. We do not have any material variable consideration arrangements, or any material payment terms with our customers other than standard payment terms which generally range from net 30 to net 90 days. We generally do not provide a right of return to our customers. Revenue is recognized net of any taxes collected from customers, which are subsequently remitted to governmental authorities.

Nature of Products and Services

We are a global supplier of innovative test and process solutions for use in manufacturing and testing in targeted markets including automotive, defense/aerospace, industrial, life sciences, security and semiconductor. We sell thermal management products including ThermoStreams, ThermoChambers, process chillers, refrigerators and freezers, which we sell under our Temptronic, Sigma, Thermonics and North Sciences (formerly Z-Sciences) product lines, and Ambrell Corporation’s (“Ambrell”) precision induction heating systems, including EKOHEAT and EASYHEAT products. As a result of the acquisition of Videology, we sell industrial-grade circuit board mounted video digital cameras and related devices, systems and software. We sell semiconductor ATE interface solutions which include manipulators, docking hardware and electrical interface products. As a result of the acquisition of Acculogic, we sell robotics-based electronic production test equipment. We provide post-warranty service and support for the equipment we sell. We sell semiconductor ATE interface solutions and certain thermal management products to the semi market. We also sell many of our products to various other markets including the automotive, defense/aerospace, industrial, life sciences and security markets.

We lease certain of our equipment under short-term leasing agreements with original lease terms of six months or less. Our lease agreements do not contain purchase options.

Types of Contracts with Customers

Our contracts with customers are generally structured as individual purchase orders which specify the exact products or services being sold or equipment being leased along with the selling price, service fee or monthly lease amount for each individual item on the purchase order. Payment terms and any other customer-specific acceptance criteria are also specified on the purchase order. We generally do not have any customer-specific acceptance criteria, other than that the product performs within the agreed upon specifications. We test substantially all products manufactured as part of our quality assurance process to determine that they comply with specifications prior to shipment to a customer.

Contract Balances

We record accounts receivable at the time of invoicing. Accounts receivable, net of the allowance for doubtful accounts, is included in current assets on our balance sheet. To the extent that we do not recognize revenue at the same time as we invoice, we record a liability for deferred revenue. In certain instances, we also receive customer deposits in advance of invoicing and recording of accounts receivable. Deferred revenue and customer deposits are included in current liabilities on our consolidated balance sheets.

The allowance for doubtful accounts reflects our best estimate of probable losses inherent in the accounts receivable balance. We determine the allowance based on known troubled accounts, if any, historical experience, and other currently available evidence.

Costs to Obtain a Contract with a Customer

The only costs we incur associated with obtaining contracts with customers are sales commissions that we pay to our internal sales personnel or third-party sales representatives. These costs are calculated based on set percentages of the selling price of each product or service sold. Commissions are considered earned by our internal sales personnel at the time we recognize revenue for a particular transaction. Commissions are considered earned by third-party sales representatives at the time that revenue is recognized for a particular transaction. We record commission expense in our consolidated statements of operations at the time the commission is earned. Commissions earned but not yet paid are included in current liabilities on our consolidated balance sheets.

Product Warranties

In connection with the sale of our products, we generally provide standard one- or two-year product warranties which are detailed in our terms and conditions and communicated to our customers. Our standard warranties are not offered for sale separately from our products; therefore, there is not a separate performance obligation related to our standard warranties. We record estimated warranty expense for our standard warranties at the time of sale based upon historical claims experience. We offer customers an option to separately purchase an extended warranty on certain products. In the case of extended warranties, we recognize revenue in the amount of the sale price for the extended warranty on a straight-line basis over the extended warranty period. We record costs incurred to provide service under an extended warranty at the time the service is provided. Warranty expense is included in selling expense in our consolidated statements of operations.

See Notes 8 and 16 for further information about our revenue from contracts with customers.

<u>Inventories</u>

Inventories are valued at cost on a first-in, first-out basis, not in excess of market value. Cash flows from the sale of inventories are recorded in operating cash flows. On a quarterly basis, we review our inventories and record excess and obsolete inventory charges based upon our established objective excess and obsolete inventory criteria. Our criteria identify excess material as the quantity of material on hand that is greater than the average annual usage of that material over the prior three years. Our criteria identify obsolete material as material that has not been used in a work order during the prior twenty-four months. In certain cases, additional excess and obsolete inventory charges are recorded based upon current market conditions, anticipated product life cycles, new product introductions and expected future use of the inventory. The excess and obsolete inventory charges we record establish a new cost basis for the related inventories.

Leases

We account for leases in accordance with ASC Topic 842 (Leases). We determine if an arrangement is a lease at inception. A lease contract is within scope if the contract has an identified asset (property, plant or equipment) and grants the lessee the right to control the use of the asset during the lease term. The identified asset may be either explicitly or implicitly specified in the contract. In addition, the supplier must not have any practical ability to substitute a different asset and would not economically benefit from doing so for the lease contract to be in scope. The lessee's right to control the use of the asset during the term of the lease must include the ability to obtain substantially all of the economic benefits from the use of the asset as well as decision-making authority over how the asset will be used. Leases are classified as either operating leases or finance leases based on the guidance in ASC Topic 842. Operating leases are included in operating lease ROU assets and operating lease liabilities in our consolidated balance sheets. Finance leases are included in property and equipment and finance lease liabilities. We do not currently have any finance leases.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. None of our leases provide an implicit rate; therefore, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Our lease terms may include options to extend or terminate the lease. We include these options in the determination of the amount of the ROU asset and lease liability when it is reasonably certain that we will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term. Certain of our operating leases contain predetermined fixed escalations of minimum rentals and rent holidays during the original lease terms. Rent holidays are periods during which we have control of the leased facility but are not obligated to pay rent. For these leases, our ROU asset and lease liability are calculated including any rent holiday in the determination of the life of the lease.

We have lease agreements which contain both lease and non-lease components, which are generally accounted for separately. In addition to the monthly rental payments due, most of our leases for our offices and warehouse facilities include non-lease components representing our portion of the common area maintenance, property taxes and insurance charges incurred by the landlord for the facilities which we occupy. These amounts are not included in the calculation of the ROU assets and lease liabilities as they are based on actual charges incurred in the periods to which they apply.

Operating lease payments are included in cash outflows from operating activities on our consolidated statements of cash flows. Amortization of ROU assets is presented separately from the change in operating lease liabilities and is included in depreciation and amortization on our consolidated statements of cash flows.

We have made an accounting policy election not to apply the recognition requirements of ASC Topic 842 to short-term leases (leases with a term of one year or less at the commencement date of the lease). Lease expense for short-term lease payments is recognized on a straight-line basis over the lease term.

See Note 11 for further disclosures regarding our leases.

Interest Rate Swap Agreement

We are exposed to interest rate risk on our floating-rate debt. We have entered into an interest rate swap agreement to effectively convert our floating-rate debt to a fixed-rate basis for a portion of our floating rate debt, as discussed further in Notes 5 and 12. The principal objective of this agreement is to eliminate the variability of the cash flows for interest payments associated with our floating-rate debt, thus reducing the impact of interest rate changes on future interest payment cash flows. We have elected to apply the hedge accounting rules in accordance with ASC Topic 815 (Derivatives and Hedging). Further, we have determined that this agreement qualifies for the shortcut method of hedge accounting. Changes in the fair value of interest rate swap agreements designated as cash flow hedges are recorded as a component of accumulated other comprehensive income (loss) within stockholders' equity and are amortized to interest expense over the term of the related debt.

Contingent Liability for Repayment of State and Local Grant Funds Received

In connection with leasing a facility in Rochester, New York, which our subsidiary, Ambrell, occupied in May 2018, we entered into agreements with the city of Rochester and the state of New York under which we received grants totaling $550 to help offset a portion of the cost of the leasehold improvements we made to this facility. The final payment of $87 was received during the three months ended March 31, 2022. In exchange for the funds we received under these agreements, we are required to create and maintain specified levels of employment in this location through various dates ending in 2024. If we fail to meet these employment targets, we may be required to repay a proportionate share of the proceeds. As of September 30, 2022, $285 of the total proceeds received could still be required to be repaid if we do not meet the targets. We have recorded this amount as a contingent liability which is included in other liabilities on our consolidated balance sheet. Those portions of the proceeds which are no longer subject to repayment are reclassified to deferred grant proceeds and amortized to income on a straight-line basis over the remaining lease term for the Rochester facility. Deferred grant proceeds are included in other current liabilities and other liabilities on our balance sheet and totaled $217 at September 30, 2022. As of September 30, 2022, we were in compliance with the employment targets as specified in the grant agreement with the city of Rochester.

Stock-Based Compensation

We account for stock-based compensation in accordance with ASC Topic 718 (Compensation - Stock Compensation) which requires that employee share-based equity awards be accounted for under the fair value method and requires the use of an option pricing model for estimating fair value of stock options, which is then amortized to expense over the service periods. See further disclosures related to our stock-based compensation plans in Note 13.

Income Taxes

The asset and liability method is used in accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for operating loss and tax credit carryforwards and for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets if it is more likely than not that such assets will not be realized.

Earnings Per Common Share

Earnings per common share - basic is computed by dividing net earnings by the weighted average number of common shares outstanding during each period. Earnings per common share - diluted is computed by dividing earnings by the weighted average number of common shares and common share equivalents outstanding during each period. Common share equivalents represent unvested shares of restricted stock and stock options and are calculated using the treasury stock method. Common share equivalents are excluded from the calculation if their effect is anti-dilutive.

The table below sets forth, for the periods indicated, a reconciliation of weighted average common shares outstanding - basic to weighted average common shares and common share equivalents outstanding - diluted and the average number of potentially dilutive securities that were excluded from the calculation of diluted earnings per share because their effect was anti-dilutive:

	Three Months Ended September 30,		**Nine Months Ended September 30,**	
	2022	**2021**	**2022**	**2021**
Weighted average common shares outstanding - basic	10,695,867	10,496,188	10,655,469	10,422,851
Potentially dilutive securities:				
Unvested shares of restricted stock and employee stock options	168,673	296,102	185,175	271,500
Weighted average common shares and common share equivalents outstanding - diluted	10,864,540	10,792,290	10,840,644	10,694,351
Average number of potentially dilutive securities excluded from calculation	518,145	237,545	491,014	283,894

Effect of Recently Issued Amendments to Authoritative Accounting Guidance

In June 2016, the Financial Accounting Standards Board ("FASB") issued amendments to the guidance for accounting for credit losses. In November 2019, the FASB deferred the effective date of these amendments for certain companies, including smaller reporting companies. As a result of the deferral, the amendments are effective for us for reporting periods beginning after December 15, 2022. The amendments replace the incurred loss impairment methodology under current U.S. GAAP with a methodology that reflects expected credit losses and requires the use of a forward-looking expected credit loss model for accounts receivables, loans, and other financial instruments. The amendments require a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. We plan to adopt the amendments when they become effective for us on January 1, 2023. We do not expect the adoption of these amendments to have a material impact on our consolidated financial statements.

(3) ACQUISITIONS

Z-Sciences

As discussed further in Note 3 to our consolidated financial statements in our 2021 Form 10-K, on October 6, 2021, we acquired substantially all of the assets of Z-Sciences Corp. ("Z-Sciences"), a developer of ultra-cold storage solutions for the medical cold chain market. The Z-Sciences product line was re-branded as "North Sciences" after our acquisition. The acquisition enhances our medical offerings and increases our presence in the life sciences market which is a key target market for us. Z-Sciences was founded in 2004. Its founder joined us as a consultant and is expected to become an employee in 2022. As of September 30, 2022, the founder was still a consultant. The purchase price for Z-Sciences was $500 in cash, subject to a customary post-closing working capital adjustment, $300 of which was paid at closing. The remaining $200 was paid on the one-year anniversary of closing. This amount is recorded as a contingent consideration liability on our balance sheet at September 30, 2022. It is included in Other Current Liabilities. The fair value of this liability at September 30, 2022 approximates its cost due to the short maturity. In addition to his salary, in connection with his prospective employment, Z-Sciences' founder will receive a multi-year restricted stock award with vesting provisions which would be contingent upon achieving future performance milestones related to sales growth and profitability of products related to the Z-Sciences business for the fiscal years from 2022 through 2026. The award will be valued at a maximum of $1,800. The actual numbers of shares to be awarded will be based on the stock price on the date of grant with a cap of 200,000 shares at the 100% attainment level of the vesting provisions that are defined in the restricted stock award agreement. The value of the award will be recorded as compensation expense in our consolidated statement of operations on a straight-line basis over the period in which the shares vest.

The acquisition of Z-Sciences has been accounted for as a business combination using purchase accounting, and, accordingly, the results of Z-Sciences have been included in our consolidated results of operations from the date of acquisition. The allocation of the Z-Sciences' purchase price was based on fair values as of October 6, 2021. Further information about the allocation of the purchase price is discussed in Note 3 to our consolidated financial statements in our 2021 Form 10-K.

Unaudited pro forma information which would give effect to the acquisition of Z-Sciences as if the acquisition occurred on January 1, 2021 is not presented because the financial results for Z-Sciences prior to our acquisition are considered immaterial.

Videology

As discussed further in Note 3 to our consolidated financial statements in our 2021 Form 10-K, on October 28, 2021, we acquired substantially all of the assets of Videology Imaging Solutions Inc. and Videology Imaging Solutions Europe B.V. (collectively, "Videology"), a global designer, developer and manufacturer of OEM digital streaming and image capturing solutions. The acquisition of Videology expands our process technology solutions, diversifies our reach into key targeted markets and broadens our customer base. It also builds on our process technology platforms by expanding our automation capabilities to add future product solutions with imaging data and analytical tools. The purchase price for Videology was $12,000 paid in cash at closing subject to a customary post-closing working capital adjustment.

The acquisition of Videology has been accounted for as a business combination using purchase accounting, and, accordingly, the results of Videology have been included in our consolidated results of operations from the date of acquisition. The allocation of the Videology purchase price was based on fair values as of October 27, 2021. Further information about the allocation of the purchase price, and goodwill and intangible assets recorded as a result of the acquisition is discussed in Note 3 to our consolidated financial statements in our 2021 Form 10-K.

The following unaudited pro forma information gives effect to the acquisition of Videology as if the acquisition occurred on January 1, 2021. These proforma summaries do not reflect any operating efficiencies or costs savings that may be achieved by the combined businesses. These proforma summaries are presented for informational purposes only and are not necessarily indicative of what the actual results of operations would have been had the acquisition taken place as of that date, nor are they indicative of future consolidated results of operations:

	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2021
Revenue	$ 23,356	$ 69,330
Net earnings	$ 2,552	$ 8,613
Diluted earnings per share	$ 0.24	$ 0.81

The pro forma results shown above do not reflect the impact on general and administrative expense of investment advisory costs, legal costs and other costs of $288 incurred by us as a direct result of the transaction.

Acculogic

As discussed further in Note 3 to our consolidated financial statements in our 2021 Form 10-K, on December 21, 2021, we completed our acquisition of Acculogic Inc. and its affiliates (collectively, “Acculogic”), a global manufacturer of robotics-based electronic production test equipment and application support services. The acquisition was completed by acquiring all of the outstanding capital stock of Acculogic. The Acculogic acquisition adds electronics test capabilities with new technologies and services as well as broadens our customer base, furthers our end market diversification and expands our international footprint. The purchase price for Acculogic was approximately $8,500 paid in cash at closing subject to a customary post-closing working capital adjustment. In addition, we may pay the seller up to an additional CAD $5,000 in the five-year period from 2022 through 2026. The additional payments will be based on a percent of net invoices for which payments have been received on systems sold to electric vehicle ("EV") or battery customers in excess of CAD $2,500 per year in each of the five years. The maximum payment is capped at CAD $5,000, which equates to approximately $3,600 at September 30, 2022. To estimate the fair value of the contingent consideration at the acquisition date, an option-based income approach using a Monte Carlo simulation model was utilized due to the non-linear payout structure. As of the acquisition date, this resulted in an estimated fair value of $1,430. This amount was recorded as a contingent consideration liability and included in the purchase price as of the acquisition date. We will reassess the estimated fair value of this liability annually using this same approach, or more frequently, if we determine that there have been material changes to the assumptions used in the calculation of the probable payout. Changes in the amount of the estimated fair value of the earnouts since the acquisition date will be recorded as operating expenses in our consolidated statement of operations in the quarter in which they occur. At September 30, 2022, there has been no change in the estimated fair value of the contingent consideration. Changes in the fair value represent the impact of changes in foreign exchange rates.

The acquisition of Acculogic has been accounted for as a business combination using purchase accounting, and, accordingly, the results of Acculogic have been included in our consolidated results of operations from the date of acquisition. During the quarter ended June 30, 2022, the post-closing working capital adjustment was finalized and resulted in a reduction in the purchase price of $371 as a result of a reduction in the estimated fair value of accounts receivable acquired. The allocation of the purchase price for Acculogic is now complete.

The allocation of the Acculogic purchase price which is presented below was based on estimated fair values as of December 21, 2021.

The excess of the purchase price over the identifiable intangible and net tangible assets was allocated to goodwill and is not deductible for tax purposes. Goodwill is attributed to synergies that are expected to result from the operations of the combined businesses.

The total purchase price of $9,426, which includes $1,430 for the estimated fair value of contingent consideration, has been allocated as follows:

Goodwill	$	3,363
Identifiable intangible assets		5,123
Tangible assets acquired and liabilities assumed:		
Cash		312
Trade accounts receivable		2,259
Inventories		1,329
Other current assets		240
Property and equipment		156
Accounts payable		(406)
Accrued expenses		(2,950)
Total purchase price	$	9,426

Further information about the intangible assets recorded as a result of the acquisition is discussed in Note 3 to our consolidated financial statements in our 2021 Form 10-K.

The following unaudited pro forma information gives effect to the acquisition of Acculogic as if the acquisition occurred on January 1, 2021. These proforma summaries do not reflect any operating efficiencies or costs savings that may be achieved by the combined businesses. These proforma summaries are presented for informational purposes only and are not necessarily indicative of what the actual results of operations would have been had the acquisition taken place as of that date, nor are they indicative of future consolidated results of operations:

	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2021
Revenue	$ 23,874	$ 70,710
Net earnings	$ 2,148	$ 6,915
Diluted earnings per share	$ 0.20	$ 0.65

The pro forma results shown above do not reflect the impact on general and administrative expense of investment advisory costs, legal costs and other costs of $1,297 incurred by us as a direct result of the transaction.

(4) SHORT-TERM INVESTMENTS

Our short-term investments at September 30, 2022 consist of investments in U.S. treasury bills which were purchased in April 2022 and which have original maturities of six months. They are all classified as held-to-maturity. Additional information about these investments at September 30, 2022 is as follows:

	Amortized Cost Basis	Gross Unrealized Gains/(Losses)	Fair Value
As of September 30, 2022			
U.S. treasury bills	$ 3,494	$ -	$ 3,494

(5) FAIR VALUE MEASUREMENTS

ASC Topic 820 (Fair Value Measurement) establishes a fair value hierarchy for instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and our own assumptions (unobservable inputs). Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of us. Unobservable inputs are inputs that reflect our assumptions about the inputs that market participants would use in pricing the asset or liability and are developed based on the best information available in the circumstances.

ASC Topic 820 identifies fair value as the exchange price, or exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As a basis for considering market participant assumptions in fair value measurements, ASC Topic 820 establishes a three-tier fair value hierarchy that distinguishes among the following:

Level 1 Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access.

Level 2 Valuations based on quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active and models for which all significant inputs are observable, either directly or indirectly.

Level 3 Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by us in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Recurring Fair Value Measurements

The interest rate swap agreement we entered into in connection with our Term Note, as discussed further in Notes 2 and 12 is measured at fair value on a recurring basis using Level 2 inputs. The contingent consideration liabilities on our balance sheet are measured at fair value on a recurring basis using Level 3 inputs. Our contingent consideration liabilities are a result of our acquisitions of Z-Sciences on October 6, 2021 and Acculogic on December 21, 2021. The contingent consideration liability for Z-Sciences represents the estimated fair value of the additional cash consideration payable that is contingent upon the Z-Sciences founder providing continued consulting services to us as discussed more fully in Note 3. It is included in Other Current Liabilities on our balance sheet. This payment was made in October 2022. The contingent consideration liability for Acculogic represents the estimated fair value of the additional cash consideration payable that is contingent upon sales to EV or battery customers as described further in Note 3. This amount was increased by $500 during the nine months ended September 30, 2022 in connection with finalizing this aspect of the purchase price allocation.

The following fair value hierarchy table presents information about liabilities measured at fair value on a recurring basis:

	Amounts at Fair Value	Fair Value Measurement Using		
		Level 1	Level 2	Level 3
As of September 30, 2022				
Contingent consideration liability – Z-Sciences	$ 179	$ -	$ -	$ 179
Contingent consideration liability – Acculogic	$ 1,336	$ -	$ -	$ 1,336
Interest rate swap	$ 557	$ -	$ 557	$ -

Changes in the fair value of our Level 3 contingent consideration liabilities for the nine months ended September 30, 2022 were as follows:

	Nine Months Ended September 30, 2022
Balance at beginning of period	$ 1,109
Adjustment to contingent consideration liability in connection with the acquisition of Acculogic	500
Impact of foreign currency translation adjustments	(94)
Balance at end of period	$ 1,515

(6) RESTRUCTURING AND OTHER CHARGES

During 2021, we recorded restructuring and other charges related to various actions including the consolidation of manufacturing for certain of our Electronic Test segment's products and changes in our executive management team. These charges are discussed more fully in Note 5 to our consolidated financial statements in our 2021 Form 10-K. There were no restructuring and other charges incurred in the nine months ended September 30, 2022. During the nine months ended September 30, 2021, we incurred $303 of charges associated with finalizing the integration of the aforementioned manufacturing operations of our Electronic Test segment and the retirement of our former Chief Financial Officer.

Accrued Restructuring

The liability for accrued restructuring that remained at January 1, 2022 related to costs associated with the move of our corporate office from our Mansfield, Massachusetts facility to our facility in New Jersey, as discussed more fully in Note 5 to our consolidated financial statements in our 2021 Form 10-K. The liability for accrued restructuring charges is included in other current liabilities on our consolidated balance sheet. Changes in the amount of the liability for accrued restructuring for the nine months ended September 30, 2022 were as follows:

Balance - January 1, 2022	$ 70
Cash payments	(7)
Adjustments to accruals	(63)
Balance - September 30, 2022	$ -

(7) GOODWILL AND INTANGIBLE ASSETS

We have three operating segments which are also our reporting units: Electronic Test, Environmental Technologies and Process Technologies. Goodwill and intangible assets on our balance sheets are the result of our acquisitions.

Goodwill

Changes in the amount of the carrying value of goodwill for the nine months ended September 30, 2022 are as follows:

Balance - January 1, 2022	$ 21,448
Adjustments to preliminary amounts recorded in the fourth quarter of 2021 for contingent consideration and intangible assets related to acquisition of Acculogic (see Note 3)	451
Impact of foreign currency translation adjustments	(505)
Balance - September 30, 2022	$ 21,394

Goodwill was comprised of the following at September 30, 2022 and December 31, 2021:

	September 30, 2022	December 31, 2021
Electronic Test	$ 3,311	$ 3,055
Environmental Technologies	1,817	1,817
Process Technologies	16,266	16,576
Total goodwill	$ 21,394	$ 21,448

Intangible Assets

Changes in the amount of the carrying value of indefinite-lived intangible assets for the nine months ended September 30, 2022 are as follows:

Balance - January 1, 2022	$ 8,428
Adjustments to preliminary amounts recorded in the fourth quarter of 2021 related to acquisition of Acculogic (see Note 3)	20
Impact of foreign currency translation adjustments	(122)
Balance – September 30, 2022	$ 8,326

Changes in the amount of the carrying value of finite-lived intangible assets for the nine months ended September 30, 2022 are as follows:

Balance - January 1, 2022	$ 13,206
Adjustments to preliminary amounts recorded in the fourth quarter of 2021 related to acquisition of Acculogic (see Note 3)	29
Impact of foreign currency translation adjustments	(525)
Amortization	(2,142)
Balance - September 30, 2022	$ 10,568

Intangible assets were allocated to our reporting segments at September 30, 2022 and December 31, 2021 as follows:

	September 30, 2022	December 31, 2021
Electronic Test:	$ 4,183	$ 5,074
Environmental Technologies	847	893
Process Technologies	13,864	15,667
Total intangible assets	$ 18,894	$ 21,634

The following tables provide further detail about our intangible assets as of September 30, 2022 and December 31, 2021:

	September 30, 2022		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Finite-lived intangible assets:			
Customer relationships	$ 16,211	$ 7,564	$ 8,647
Technology	2,812	892	1,920
Patents	590	589	1
Backlog	483	483	-
Software	270	270	-
Trade name	140	140	-
Total finite-lived intangible assets	20,506	9,938	10,568
Indefinite-lived intangible assets:			
Trademarks	8,326	-	8,326
Total intangible assets	$ 28,832	$ 9,938	$ 18,894

	December 31, 2021		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Finite-lived intangible assets:			
Customer relationships	$ 16,544	$ 6,160	$ 10,384
Technology	2,950	569	2,381
Patents	590	585	5
Backlog	521	85	436
Software	270	270	-
Trade name	140	140	-
Total finite-lived intangible assets	21,015	7,809	13,206
Indefinite-lived intangible assets:			
Trademarks	8,428	-	8,428
Total intangible assets	$ 29,443	$ 7,809	$ 21,634

We generally amortize our finite-lived intangible assets over their estimated useful lives based on the pattern in which the economic benefits of the intangible assets are expected to be consumed, or on a straight-line basis, if an alternate amortization method cannot be reliably determined. Any such alternate amortization method would be based on the pattern in which the economic benefits of the intangible assets are expected to be consumed. None of our intangible assets have any residual value.

The following table sets forth the estimated annual amortization expense for each of the next five years:

2022 (remainder)	$ 549
2023	$ 2,071
2024	$ 1,950
2025	$ 1,744
2026	$ 1,136

(8) REVENUE FROM CONTRACTS WITH CUSTOMERS

The following tables provide additional information about our revenue from contracts with customers, including revenue by customer and product type and revenue by market. The information about revenue by market for the three months and nine months ended September 30, 2021 has been reclassified to be consistent with how the information for the current period is presented. See also Note 16 for information about revenue by operating segment and geographic region.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue by customer type:				
End user	$ 22,351	$ 15,818	$ 60,785	$ 49,224
OEM/Integrator/Distributor	8,420	5,326	23,638	13,296
	$ 30,771	$ 21,144	$ 84,423	$ 62,520
Revenue by product type:				
Thermal test	$ 5,836	$ 5,284	$ 16,844	$ 14,126
Thermal process	11,026	6,412	27,990	18,785
Semiconductor test	7,770	7,561	20,409	24,455
Video imaging	2,447	-	6,692	-
Flying probe and in-circuit testers	1,605	-	5,359	-
Service/other	2,087	1,887	7,129	5,154
	$ 30,771	$ 21,144	$ 84,423	$ 62,520
Revenue by market:				
Semiconductor	$ 19,170	$ 13,656	$ 48,969	$ 42,653
Industrial	2,130	2,191	7,859	5,142
Automotive (including Electric Vehicles)	1,621	1,339	7,971	3,508
Life Sciences	1,715	715	3,583	1,944
Defense/Aerospace	1,914	947	4,830	3,721
Security	871	6	2,239	6
Other	3,350	2,290	8,972	5,546
	$ 30,771	$ 21,144	$ 84,423	$ 62,520

There were no significant changes in the amount of the allowance for doubtful accounts for the three and nine months ended September 30, 2022.

(9) MAJOR CUSTOMERS

During the nine months ended September 30, 2022, no customer accounted for 10% or more of our consolidated revenue. During the nine months ended September 30, 2021, one customer accounted for 14% of our consolidated revenue. This revenue was primarily generated by our Electronic Test segment. No other customers accounted for 10% or more of our consolidated revenue during the nine months ended September 30, 2021.

(10) INVENTORIES

Inventories held at September 30, 2022 and December 31, 2021 were comprised of the following:

	September 30, 2022	December 31, 2021
Raw materials	$ 16,579	$ 10,403
Work in process	2,032	1,250
Inventory consigned to others	59	44
Finished goods	2,422	1,166
Total inventories	$ 21,092	$ 12,863

Total charges incurred for excess and obsolete inventory for the three months and nine months ended September 30, 2022 and 2021, respectively, were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Excess and obsolete inventory charges	$ 77	$ 61	$ 307	$ 154

(11) LEASES

As previously discussed in Note 2, we account for our leases in accordance with the guidance in ASC Topic 842. We lease our offices, warehouse facilities and certain equipment under non-cancellable operating leases that expire at various dates through 2031. Total operating lease and short-term lease costs for the three and nine months ended September 30, 2022 and 2021, respectively, were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Operating lease cost	$ 330	$ 247	$ 973	$ 865
Short-term lease cost	$ 7	$ 20	$ 51	$ 60

The following is additional information about our leases as of September 30, 2022:

Range of remaining lease terms (in years)	0.5 to 8.6
Weighted average remaining lease term (in years)	5.2
Weighted average discount rate	4.1%

Maturities of lease liabilities as of September 30, 2022 were as follows:

2022 (remainder)	$	409
2023		1,624
2024		1,571
2025		744
2026		473
Thereafter		1,378
Total lease payments	$	6,199
Less imputed interest		(573)
Total	$	5,626

Cash Flow Information

Total amortization of ROU assets was $334 and $972 for the three months and nine months ended September 30, 2022, respectively, and $231 and $760 for the three months and nine months ended September 30, 2021, respectively.

During the nine months ended September 30, 2022, we executed an amendment to the lease for our facility in Singapore which extended the term for a period of 24 months commencing on April 1, 2022 and expiring on March 31, 2024. At the effective date of this modification, we recorded a non-cash increase in our ROU assets and operating lease liabilities of approximately $51. During this same period, we also executed a 48-month lease for an automobile for our Videology operation in Europe. At the effective date of this lease, we recorded a non-cash increase in our ROU assets and operating lease liabilities of approximately $38.

During the nine months ended September 30, 2021, we executed a lease for approximately 3,888 square feet of office space for the engineering and sales staff located in Fremont, California. This lease has a 38.5-month term beginning in October 2021. At the effective date of this lease, we recorded an increase in our ROU assets and operating lease liabilities of approximately $202.

(12) DEBT

Letters of Credit

We have issued letters of credit as the security deposits for certain of our domestic leases. These letters of credit are secured by pledged certificates of deposit which are classified as Restricted Certificates of Deposit on our consolidated balance sheets. The terms of our leases require us to renew these letters of credit at least 30 days prior to their expiration dates for successive terms of not less than one year until lease expiration. Our outstanding letters of credit at September 30, 2022 and December 31, 2021 consisted of the following:

				Letters of Credit Amount Outstanding	
Facility	**Original L/C Issue Date**	**L/C Expiration Date**	**Lease Expiration Date**	**September 30, 2022**	**December 31, 2021**
Mt. Laurel, NJ	3/29/2010	4/30/2023	4/30/2031	$ 50	$ 50
Mansfield, MA	10/27/2010	12/31/2024	12/31/2024	50	50
				$ 100	$ 100

Credit Facility

On October 15, 2021 (the “Closing Date”), we entered into an Amended and Restated Loan and Security Agreement with M&T Bank (“M&T”) which, on October 28, 2021, was amended by the Joinder and Amendment to Amended and Restated Loan and Security Agreement and which, on December 30, 2021, was further amended by the Joinder and Second Amendment to Amended and Restated Loan and Security Agreement (as amended, the “Loan Agreement”).

The Loan Agreement included a $25,000 non-revolving delayed draw term note (the “Term Note”) and a $10,000 revolving credit facility (together with the Term Note, the “Credit Facility”). The Credit Facility had a five year contract period that began on the Closing Date and expired on October 15, 2026, and draws under the Term Note were permissible for two years.

On September 20, 2022, we further amended the Loan Agreement by entering into a Third Amendment to Amended and Restated Loan and Security Agreement (the Loan Agreement, as amended by the Third Amendment, the “Amended Loan Agreement”) and the Third Amended and Restated Delayed Draw Term Note 1A. Under the Amended Loan Agreement, the maximum loan amount that we may borrow under the Term Note increased from $25,000 to $50,500, which raises the available funding at September 30, 2022 to $30,000. Under the Amended Loan Agreement, the maturity date of the Term Note and revolving credit facility were also extended to September 19, 2027 (the “Contract Period”). As of September 30, 2022, we had not borrowed any amounts under the revolving credit facility. Our borrowings under the Term Note are discussed below and occurred prior to entering into the Amended Loan Agreement. Interest expense for the three and nine months ended September 30, 2022 was $179 and $457, respectively. There was no interest expense in the three or nine months ended September 30, 2021.

The principal balance of the revolving credit facility and the principal balance of any amount drawn under the Term Note accrues interest based on the secured overnight financing rate for U.S. government securities (“SOFR”) or a bank-defined base rate plus an applicable margin, depending on leverage. Each draw under the Term Note will have an option for us of either (i) up to a five year amortizing term loan with a balloon due at maturity, or (ii) up to a five year term with up to seven years amortization with a balloon due at maturity. Any amortization greater than five years will be subject to an excess cash flow recapture. The Amended Loan Agreement also allows us to enter into hedging contracts with M&T, including interest rate swap agreements, interest rate cap agreements, interest rate collar agreements, or any other agreements or that are designed to protect us against fluctuations in interest rates or currency exchange rates.

The Amended Loan Agreement contains customary default provisions, including but not limited to the failure by us to repay obligations when due, violation of provisions or representations provided in the Amended Loan Agreement, bankruptcy by us, suspension of our business or any of our subsidiaries and certain material judgments. After expiration of the Contract Period or if a continued event of default occurs, interest will accrue on the principal balance at a rate of 2% in excess of the then applicable non-default interest rate. The Amended Loan Agreement includes customary affirmative, negative and financial covenants, including a maximum ratio of consolidated funded debt to consolidated EBITDA and a fixed charge coverage ratio. Our obligations under the Amended Loan Agreement are secured by liens on substantially all of our tangible and intangible assets that are owned as of the Closing Date or acquired thereafter.

On October 28, 2021, we drew $12,000 under the Term Note to finance the acquisition of Videology as discussed above. We also entered into an interest rate swap agreement with M&T as of this date which is designed to protect us against fluctuations in interest rates during the five year repayment and amortization period. As a result, the annual interest rate we expect to pay for this draw under the Term Note is fixed at approximately 3.2% based on current leverage.

On December 29, 2021, we drew $8,500 under the Term Note to finance the acquisition of Acculogic as discussed above. We did not enter into an interest rate swap agreement with M&T related to this draw. The annual interest rate we expect to pay for this draw under the Term Note is variable. At September 30, 2022 it was approximately 4.4% based on current leverage. Effective October 15, 2022, this rate had increased to approximately 5.2%.

The following table sets forth the maturities of long-term debt for each of the next five years:

2022 (remainder)	$	1,167
2023		4,100
2024		4,100
2025		4,100
2026		3,700
	$	17,167

(13) STOCK-BASED COMPENSATION PLAN

As of September 30, 2022, we had unvested restricted stock awards and stock options granted under stock-based compensation plans that are described more fully in Note 15 to the consolidated financial statements in our 2021 Form 10-K.

Our unvested restricted stock awards and stock options are accounted for based on their grant date fair value. As of September 30, 2022, total compensation expense to be recognized in future periods is $3,298. The weighted average period over which this expense is expected to be recognized is 2.5 years.

The following table summarizes the compensation expense we recorded during the three and nine months ended September 30, 2022 and 2021 related to unvested shares of restricted stock and stock options:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Cost of revenues	$ 18	$ 10	$ 44	$ 17
Selling expense	9	8	23	17
Engineering and product development expense	6	17	43	43
General and administrative expense	417	336	1,263	1,017
	$ 450	$ 371	$ 1,373	$ 1,094

There was no compensation expense capitalized in three and nine months ended September 30, 2022 or 2021.

Stock Options

We record compensation expense for stock options based on the fair market value of the options as of the grant date. No option may be granted with an exercise period in excess of ten years from the date of grant. Generally, stock options will be granted with an exercise price equal to the fair market value of our stock on the date of grant and will vest over four years.

The fair value for stock options granted during the nine months ended September 30, 2022 and 2021 was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions:

	2022	2021
Risk-free interest rate	2.05%	1.03%
Dividend yield	0.00%	0.00%
Expected common stock market price volatility factor	.55	.50
Weighted average expected life of stock options (years)	6.25	6.25

The per share weighted average fair value of stock options issued during the nine months ended September 30, 2022 and 2021 was $4.53 and $5.70, respectively.

The following table summarizes the activity related to stock options for the nine months ended September 30, 2022:

	Number of Shares	Weighted Average Exercise Price
Options outstanding, January 1, 2022 (59,195 exercisable)	408,869	9.07
Granted	202,540	8.45
Exercised	(8,060)	4.74
Canceled	(22,930)	9.10
Options outstanding, September 30, 2022 (167,886 exercisable)	580,419	8.91

Restricted Stock Awards

We record compensation expense for restricted stock awards based on the quoted market price of our stock at the grant date and amortize the expense over the vesting period. Restricted stock awards generally vest over four years for employees and over one year for our independent directors (25% at each of March 31, June 30, September 30, and December 31 of the year in which they were granted).

Since August 2020, we have increasingly granted performance-based restricted stock awards where the ultimate number of shares that vest can vary between 0% and 150% of the amount of the original award and is based on the achievement of specified performance metrics. Vesting for these awards is generally cliff vesting at the end of the period over which the performance metrics are measured. Compensation expense for these awards is recorded on a straight-line basis over the vesting period and is based on the expected final vesting percentage, which is re-assessed at the end of each reporting period and adjusted with a catch-up adjustment, as needed. Our initial assumption at the grant date of these awards is that the award will vest at the 100% level. The awards granted prior to January 1, 2022 are discussed in more detail in Note 15 to the consolidated financial statement in our 2021 Form 10-K. During the three months ended June 30, 2022, as a result of our quarter end re-assessment of the probable final vesting percentages for our performance-based awards, we adjusted the probable final vesting percentage for the awards that will vest on August 24, 2023 from 100% to 150%. As a result, we recorded a catch-up adjustment of $130 during the three months ended June 30, 2022. As of September 30, 2022, we have concluded that the probable final vesting percentage for these awards continues to be 150% and, accordingly, we recorded expense during the three months ended September 30, 2022 based on this estimate. There have been no significant changes to our assumptions related to the expected vesting percentages for any other performance-based awards as of September 30, 2022.

On March 9, 2022, our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") received restricted stock awards totaling 20,493 shares valued at $200 as of the date of grant. These shares vest on the third anniversary of the grant date at a vesting percentage that could range from 0% to 150% of the number of shares awarded on March 9, 2022. The final vesting percentage will be based on the achievement of certain performance metrics, including revenue compound annual growth rate and diluted earnings per share excluding amortization of intangibles, for specified time periods as determined by the Compensation Committee of our Board of Directors. As of September 30, 2022, we have estimated that these shares will vest at 100% of the original amount.

The following table summarizes the activity related to unvested restricted stock awards for the nine months ended September 30, 2022:

	Number of Shares	Weighted Average Grant Date Fair Value
Unvested shares outstanding, January 1, 2022	262,533	7.16
Granted	123,533	9.21
Vested	(82,672)	7.85
Forfeited	(5,944)	9.16
Unvested shares outstanding, September 30, 2022	297,450	7.86

The total fair value of the restricted stock awards that vested during the nine months ended September 30, 2022 and 2021 was $550 and $981, respectively, as of the vesting dates of these awards.

(14) EMPLOYEE STOCK PURCHASE PLAN

The inTEST Corporation Employee Stock Purchase Plan (the “ESPP”) was adopted by the Board in April 2021 subject to approval by our stockholders, which occurred on June 23, 2021 at our Annual Meeting of Stockholders. The ESPP provides our eligible employees with an opportunity to purchase common stock through accumulated payroll deductions at a discounted purchase price. The ESPP became effective on October 1, 2021.

The ESPP provides that an aggregate of up to 250,000 shares of our common stock will be available for issuance thereunder. The shares of our common stock purchasable under the ESPP will be shares of authorized but unissued or reacquired shares, including shares repurchased by us on the open market.

During the nine months ended September 30, 2022, employees purchased 21,749 shares of our stock through the ESPP at a cost of $148. The closing market price on the dates of purchase were $10.73, $6.82 and $7.63, respectively. The prices paid by employees were $9.12, $5.80 and $6.49, respectively, which represented a 15% discount. The total amount of the discount of $28 was recorded as compensation expense in our consolidated statements of operations. From the effective date of the ESPP through September 30, 2022, a total of 25,740 shares of stock have been purchased by employees through the ESPP at a cost of $191. We have recorded a total of $34 of compensation expense in our consolidated statements of operations related to these shares.

(15) EMPLOYEE BENEFIT PLANS

We have defined contribution 401(k) plans for our employees who work in the U.S. All permanent employees of inTEST Corporation, inTEST EMS LLC, Temptronic Corporation and Videology who are at least 18 years of age are eligible to participate in the inTEST Corporation Incentive Savings Plan. We match employee contributions dollar for dollar up to 10% of the employee's annual compensation, with a maximum limit of $5. Employer contributions vest ratably over four years. Matching contributions are discretionary. For the three and nine months ended September 30, 2022 we recorded $83 and $433 of expense for matching contributions, respectively. For the three and nine months ended September 30, 2021 we recorded $51 and $322 of expense for matching contributions, respectively.

All permanent employees of Ambrell are immediately eligible to participate in the Ambrell Corporation Savings & Profit Sharing Plan (the "Ambrell Plan") upon employment and are eligible for employer matching contributions after completing six months of service, as defined in the Ambrell Plan. The Ambrell Plan allows eligible employees to make voluntary contributions up to 100% of compensation, up to the federal government contribution limits. We will make a matching contribution of 50% of each employee's contributions up to a maximum of 10% of the employee's deferral with a maximum limit of $5. For the three and nine months ended September 30, 2022 we recorded $46 and $232 of expense for matching contributions, respectively. For the three and nine months ended September 30, 2021 we recorded $44 and $131 of expense for matching contributions, respectively.

(16) SEGMENT INFORMATION

During the year ended December 31, 2021, we managed our business as two operating segments which were also our reportable segments and reporting units: Thermal and EMS. As previously discussed in Note 1, effective January 1, 2022, we reorganized our segments to better align with our plan to manage and report our business going forward. This change in our operating and reporting structure reflects the evolution of our business, particularly as a result of the broadening of our product portfolio through the acquisitions we completed in the fourth quarter of 2021, which are discussed more fully in Note 3. Accordingly, for 2022, we have three operating segments which are also our reportable segments and reporting units: Electronic Test (which includes our semiconductor test equipment, flying probe and in-circuit testers), Environmental Technologies (which includes our thermal test, process and storage products) and Process Technologies (which includes our induction heating and video imaging products). Prior period information has been reclassified to be comparable to the current period's presentation.

Our management team, including our CEO who is also our Chief Operating Decision Maker as defined under U.S. GAAP, evaluates the performance of our operating segments primarily on income from divisional operations which represents earnings before income tax expense and excludes other income (expense), corporate expenses and acquired intangible amortization.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue:				
Electronic Test	$ 10,408	$ 8,103	$ 28,983	$ 25,658
Environmental Technologies	7,631	6,875	22,131	19,720
Process Technologies	12,732	6,166	33,309	17,142
Total revenue	$ 30,771	$ 21,144	$ 84,423	$ 62,520
Income from divisional operations:				
Electronic Test	$ 2,406	$ 2,634	$ 6,486	$ 8,858
Environmental Technologies	1,021	1,090	2,893	3,126
Process Technologies	2,465	1,078	5,764	2,695
Total income from divisional operations	5,892	4,802	15,143	14,679
Corporate expenses	(2,138)	(1,944)	(6,312)	(5,597)
Acquired intangible amortization	(595)	(309)	(2,142)	(918)
Other income (expense)	(120)	(17)	(425)	2
Earnings before income tax expense	$ 3,039	$ 2,532	$ 6,264	$ 8,166

	September 30, 2022	December 31, 2021
Identifiable assets:		
Electronic Test	$ 28,370	$ 26,251
Environmental Technologies	17,728	15,411
Process Technologies	55,148	52,120
Corporate	5,455	10,123
	$ 106,701	$ 103,905

The following table provides information about our geographic areas of operation. Revenue is based on the location to which the goods are shipped.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue:				
U.S.	$ 12,619	$ 6,271	$ 35,921	$ 18,650
Foreign	18,152	14,873	48,502	43,870
	$ 30,771	$ 21,144	$ 84,423	$ 62,520

	September 30, 2022	December 31, 2021
Property and equipment:		
U.S.	$ 2,689	$ 2,346
Foreign	380	342
	$ 3,069	$ 2,688

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Risk Factors and Forward-Looking Statements

In addition to historical information, this Quarterly Report on Form 10-Q for the period ended September 30, 2022 (this "Report"), including this management's discussion and analysis ("MD&A"), contains statements that are considered "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. These statements do not convey historical information but relate to predicted or potential future events and financial results, such as statements of our plans, strategies and intentions, or our future performance or goals that are based upon management's current expectations. Our forward-looking statements can often be identified by the use of forward-looking terminology such as "believes," "expects," "intends," "may," "could," "will," "should," "plans," "projects," "forecasts," "seeks," "anticipates," "goal," "objective," "target," "estimate," "future," "outlook," "vision," or variations of such words or similar terminology. Investors and prospective investors are cautioned that such forward-looking statements are only projections based on current estimations. These statements involve risks and uncertainties and are based upon various assumptions. Such risks and uncertainties include, but are not limited to:

- our ability to execute on our 5-Point Strategy;
- our ability to grow our presence in our key target and international markets;
- the possibility of future acquisitions or dispositions and the successful integration of acquired operations;
- the success of our strategy to diversify our business by entering markets outside the semiconductor and automated test equipment ("ATE") markets, collectively the "semi market";
- indications of a change in the market cycles in the semi market, or other markets we serve;
- developments and trends in the semi market, including changes in the demand for semiconductors;
- our ability to convert backlog to sales and to ship product in a timely manner;
- the loss of any one or more of our largest customers, or a reduction in orders by a major customer;
- the availability of materials used to manufacture our products;
- the impact of current global supply chain constraints or other interruptions in our supply chain caused by external factors, including the ongoing war in Ukraine and COVID-19;
- the impact of inflation on our business and financial condition;
- the impact of COVID-19 on our business, liquidity, financial condition and results of operations;
- the sufficiency of cash balances, lines of credit and net cash from operations;
- stock price fluctuations;
- access to capital and the ability to borrow funds or raise capital to finance potential acquisitions or for working capital;
- changes in the rate of, and timing of, capital expenditures by our customers;
- effects of exchange rate fluctuations;
- progress of product development programs;
- the anticipated market for our products;
- the availability of and retention of key personnel or our ability to hire personnel at anticipated costs;
- general economic conditions both domestically and globally, including rising interest rates, and
- other risk factors included in Part I, Item 1A - "Risk Factors" in our 2021 Form 10-K.

These risks and uncertainties, among others, could cause our actual future results to differ materially from those described in our forward-looking statements or from our prior results. Any forward-looking statement made by us in this Report is based only on information currently available to us and speaks to circumstances only as of the date on which it is made. We are not obligated to update these forward-looking statements, even though our situation may change in the future.

Overview

This MD&A should be read in conjunction with the accompanying consolidated financial statements. In addition, please refer to the discussion of our business and markets contained in Part I, Item 1 of our 2021 Form 10-K.

We are a global supplier of innovative test and process solutions for use in manufacturing and testing across a wide range of markets including automotive, defense/aerospace, industrial, life sciences, security and semiconductor. During the year ended December 31, 2021, we managed our business as two operating segments which were also our reportable segments and reporting units: Thermal Products ("Thermal") and Electromechanical Solutions ("EMS"). Effective January 1, 2022, we reorganized our operating segments to better align with our plan to manage and report our business going forward. This change in our operating and reporting structure reflects the evolution of our business, particularly as a result of the broadening of our product portfolio through the acquisitions we completed in the fourth quarter of 2021, which are discussed more fully in Note 3 to our consolidated financial statements in this Report. Accordingly, for 2022, we have three operating segments which are also our reportable segments and reporting units: Electronic Test (which includes our semiconductor test equipment, flying probe and in-circuit testers), Environmental Technologies (which includes our thermal test, process and storage products) and Process Technologies (which includes our induction heating and video imaging products). Prior period information has been reclassified to be comparable to the current period's presentation.

All of our operating segments have multiple products that we design, manufacture and market to our customers. Due to a number of factors, our products have varying levels of gross margin. These factors include, for example, the amount of engineering time required to develop the product, the market or customer to which we sell the product and the level of competing products available from other suppliers. The needs of our customers ultimately determine the products that we sell in a given time period. Therefore, the mix of products sold in a given period can change significantly when compared against the prior period. As a result, our consolidated gross margin may be significantly impacted by a change in the mix of products sold in a particular period.

Markets

As discussed further in Part I, Item 1 "Markets" of our 2021 Form 10-K, we are focused on specific target markets which include automotive, defense/aerospace, industrial, life sciences, security as well as both the front-end and back-end of the semiconductor manufacturing industry ("semi" or "semi market"). The semi market, which includes both the broader semiconductor market, as well as the more specialized ATE and wafer production sectors within the broader semiconductor market, has historically been the largest single market in which we operate. The semi market is characterized by rapid technological change, competitive pricing pressures and cyclical market patterns and is subject to periods of significant expansion or contraction in demand. Our intention is to continue diversifying our markets, our product offerings within the markets we serve and our customer base across all of our markets with the goal of reducing our dependence on any one market, product or customer. In particular, we are seeking to reduce the impact of volatility in the semi market on our results of operations.

The portion of our business that is derived from the semi market is substantially dependent upon the demand for ATE by semiconductor manufacturers and companies that specialize in the testing of integrated circuits ("ICs") and, for our induction heating products, the demand for wafer production equipment. Demand for ATE or wafer production equipment is primarily driven by semiconductor manufacturers that are opening new, or expanding existing, semiconductor fabrication facilities or upgrading equipment, which in turn is dependent upon the current and anticipated market demand for ICs and products incorporating ICs. Such market demand can be the result of market expansion, development of new technologies or redesigned products to incorporate new features, or the replacement of aging equipment.

In the past, the semi market has been highly cyclical with recurring periods of oversupply, which often severely impact the semi market's demand for the products we manufacture and sell into the market. This cyclicality can cause wide fluctuations in both our orders and revenue and, depending on our ability to react quickly to these shifts in demand, can significantly impact our results of operations. Market cycles are difficult to predict and, because they are generally characterized by sequential periods of growth or declines in orders and revenue during each cycle, year over year comparisons of operating results may not always be as meaningful as comparisons of periods at similar points in either up or down cycles. These periods of heightened or reduced demand can shift depending on various factors impacting both our customers and the markets that they serve. In addition, during both downward and upward cycles in the semi market, in any given quarter, the trend in both our orders and revenue can be erratic. This can occur, for example, when orders are canceled or currently scheduled delivery dates are accelerated or postponed by a significant customer or when customer forecasts and general business conditions fluctuate during a quarter.

While a significant portion of our orders and revenue are derived from the semi market, and our operating results generally follow the overall trend in the semi market, in any given period we may experience anomalies that cause the trend in our revenue from the semi market to deviate from the overall trend in the market. We believe that these anomalies may be driven by a variety of factors within the semi market, including, for example, changing product requirements, longer periods between new product offerings by OEMs and changes in customer buying patterns. In addition, in recent periods, we have seen instances when demand within the semi market is not consistent for each of our operating segments or for any given product within a particular operating segment. This inconsistency in demand can be driven by a number of factors but, in most cases, we have found that the primary reason is unique customer-specific changes in demand for certain products driven by the needs of their customers or markets served. Recently this has become more pronounced for our sales into the wafer production sector within the broader semiconductor market due to the limited market penetration we have into this sector and the variability of orders we have experienced from the few customers we support. These shifts in market practices and customer-specific needs have had, and may continue to have, varying levels of impact on our operating results and are difficult to quantify or predict from period to period. Management has taken, and will continue to take, such actions it deems appropriate to adjust our strategies, products and operations to counter such shifts in market practices as they become evident.

Acquisitions

A key element to our strategy for growth is through acquisitions. As discussed more fully in Note 3 to our consolidated financial statements in this Report, during 2021, we completed three acquisitions (collectively the "acquired businesses") that expanded our technology offerings, diversified our markets and customers and expanded our reach into Europe.

On October 6, 2021, we acquired substantially all of the assets of Z-Sciences (now North Sciences), a developer of ultra-cold storage solutions for the life sciences cold chain market. This small, tuck-in transaction enhances our technology, adds new talent, and provides a low-cost entry into this fast growing, fragmented market. This business is included in our Environmental Technologies segment.

On October 28, 2021, we acquired substantially all of the assets of Videology, a global designer, developer and manufacturer of OEM digital streaming and image capturing solutions. The acquisition expanded our process technology offerings, diversified our reach into key target markets and broadened our customer base. This business is included in our Process Technologies segment.

On December 21, 2021, we acquired Acculogic, a global manufacturer of robotics-based electronic production test equipment and application support services. The acquisition expanded our global reach and enhanced our product portfolio with leading technologies and automation services. This business is included in our Electronic Test segment.

Orders and Backlog

The following table sets forth, for the periods indicated, a breakdown of the orders received by operating segment and market (in thousands).

	Three Months Ended September 30,		Change		Three Months Ended June 30,	Change	
	2022	2021	$	%	2022	$	%
Orders:							
Electronic Test	$ 11,299	$ 7,435	$ 3,864	52%	$ 14,614	$ (3,315)	(23)%
Environmental Technologies	8,978	6,904	2,074	30%	9,462	(484)	(5)%
Process Technologies	12,403	6,809	5,594	82%	16,442	(4,039)	(25)%
	$ 32,680	$ 21,148	$ 11,532	55%	$ 40,518	$ (7,838)	(19)%
Semi	$ 19,181	$ 13,365	$ 5,816	44%	$ 26,732	$ (7,551)	(28)%
Industrial	2,309	2,329	(20)	(1)%	2,366	(57)	(2)%
Auto/EV	2,870	2,161	709	33%	2,750	120	4%
Life Sciences	927	195	732	375%	1,535	(608)	(40)%
Defense/Aerospace	3,149	1,174	1,975	168%	1,897	1,252	66%
Security	1,072	71	1,001	1,410%	989	83	8%
Other	3,172	1,853	1,319	71%	4,249	(1,077)	(25)%
	$ 32,680	$ 21,148	$ 11,532	55%	$ 40,518	$ (7,838)	(19)%

	Nine Months Ended September 30,		Change	
	2022	2021	$	%
Orders:				
Electronic Test	$ 35,209	$ 28,198	$ 7,011	25%
Environmental Technologies	25,355	21,168	4,187	20%
Process Technologies	37,697	22,117	15,580	70%
	$ 98,261	$ 71,483	$ 26,778	37%
Semi	$ 58,295	$ 47,078	$ 11,217	24%
Industrial	7,897	6,497	1,400	22%
Auto/EV	8,239	6,053	2,186	36%
Life Sciences	3,678	1,759	1,919	109%
Defense/Aerospace	6,897	4,042	2,855	71%
Security	2,214	71	2,143	3,018%
Other	11,041	5,983	5,058	85%
	$ 98,261	$ 71,483	$ 26,778	37%

Total consolidated orders for the three and nine months ended September 30, 2022, were $32.7 million and $98.3 million, respectively. This compares to $21.1 million and $71.5 million for the three and nine months ended September 30, 2021, respectively, and $40.5 million for the three months ended June 30, 2022. The acquired businesses contributed $4.5 million or 14% of the total orders in the third quarter of 2022 and $14.9 million or 15% of the total orders in the first nine months of 2022.

The increase in orders in the first nine months of 2022 as compared to the same period in 2021 reflects greater levels of demand across all our markets combined with the impact of the acquired businesses. Demand for both our front-end and back-end semi market applications has continued to show strength which we attribute to a combination of increased demand for induction heating technology solutions for silicon carbide ("SiC") applications as well as test solutions for analog and mixed signal applications. Strength in the automotive market reflects demand for electric vehicle ("EV") related products. In addition to these market specific factors, we believe the overall strength in our business reflects the success of our new products and growth in our customer base.

At September 30, 2022, our backlog of unfilled orders for all products was approximately $47.9 million compared with approximately $20.4 million at September 30, 2021 and $46.0 million at June 30, 2022. The amounts at September 30, 2022, June 30, 2022 and March 31, 2022 included approximately $7.5 million, $7.7 million and $7.6 million, respectively, from acquired businesses. The significant increase in our backlog as compared to September 30, 2021 reflects several orders received which we expect to ship over a longer period of time than has historically been the case for us as well as the impact of the acquired businesses. Our backlog includes customer orders which we have accepted, essentially all of which we expect to deliver in 2022 and the first half of 2023, subject to supply chain constraints. While backlog is calculated on the basis of firm purchase orders, a customer may cancel an order or accelerate or postpone currently scheduled delivery dates. Our backlog may be affected by the tendency of customers to rely on short lead times available from suppliers, including us, in periods of depressed demand. In periods of increased demand, there is a tendency towards longer lead times, which has the effect of increasing backlog. As a result, our backlog at a particular date is not necessarily indicative of sales for any future period.

Revenue

The following table sets forth, for the periods indicated, a breakdown of revenue by operating segment and market (in thousands).

	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	Change $	Change %	Three Months Ended June 30, 2022	Change $	Change %
Revenue:							
Electronic Test	$ 10,408	$ 8,103	$ 2,305	28%	$ 9,797	$ 611	6%
Environmental Technologies	7,631	6,875	756	11%	7,507	124	2%
Process Technologies	12,732	6,166	6,566	106%	12,267	465	4%
	$ 30,771	$ 21,144	$ 9,627	46%	$ 29,571	$ 1,200	4%
Semi	$ 19,170	$ 13,656	$ 5,514	40%	$ 16,409	$ 2,761	17%
Industrial	2,130	2,191	(61)	(3)%	2,930	(800)	(27)%
Auto/EV	1,621	1,339	282	21%	3,594	(1,973)	(55)%
Life Sciences	1,715	715	1,000	140%	1,169	546	47%
Defense/Aerospace	1,914	947	967	102%	1,423	491	35%
Security	871	6	865	14,417%	794	77	10%
Other	3,350	2,290	1,060	46%	3,252	98	3%
	$ 30,771	$ 21,144	$ 9,627	46%	$ 29,571	$ 1,200	4%

	Nine Months Ended September 30,		Change	
	2022	2021	$	%
Revenue:				
Electronic Test	$ 28,983	$ 25,658	$ 3,325	13%
Environmental Technologies	22,131	19,720	2,411	12%
Process Technologies	33,309	17,142	16,167	94%
	$ 84,423	$ 62,520	$ 21,903	35%
Semi	$ 48,969	$ 42,653	$ 6,316	15%
Industrial	7,859	5,142	2,717	53%
Auto/EV	7,971	3,508	4,463	127%
Life Sciences	3,583	1,944	1,639	84%
Defense/Aerospace	4,830	3,721	1,109	30%
Security	2,239	6	2,233	37,217%
Other	8,972	5,546	3,426	62%
	$ 84,423	$ 62,520	$ 21,903	35%

Total consolidated revenue for the three and nine months ended September 30, 2022 was $30.8 million and $84.4 million, respectively. This compares to $21.1 million and $62.5 million for the three and nine months ended September 30, 2021, respectively, and $29.6 million for the three months ended June 30, 2022. The acquired businesses contributed $4.8 million or 15% of the total revenue in the third quarter of 2022 and $14.0 million or 17% of the total revenue in the first nine months of 2022.

This increase in our revenue in the first nine months of 2022 as compared to the same period in 2021 reflects greater levels of demand across all our markets combined with the impact of the acquired businesses. The acquired businesses contributed to growth in automotive, security, life sciences and other markets.

War in Ukraine and Global Supply Chain Constraints

The ongoing war between Russia and Ukraine continues to contribute to global inflationary pressures and the availability of certain raw materials produced in that region, further exacerbating global supply chain challenges that emerged after the onset of the COVID-19 pandemic as described below. As discussed in Part I, Item 1A "Risk Factors" in our 2021 Form 10-K, Acculogic, which we acquired in December 2021, purchases certain material from a key sole-source supplier in Belarus, which is bordered by Russia to the east and northeast and Ukraine to the south. We estimate that we currently have a six to nine month supply of this material. In addition, we are in the process of qualifying an alternate supplier for this material.

In addition, while we have been able to mitigate a significant portion of the supply chain and logistics challenges that we have encountered in the first nine months of 2022, we expect to continue to experience increased prices, lack of availability and logistics delays for the foreseeable future. The actions we are taking to mitigate these risks include qualifying new vendors as alternate sources in our supply chain, increasing our inventory of raw materials and ordering further in advance of when we expect to need materials than has been our practice in the past. We have increased, and may further increase, the prices that we charge our customers as a result of increased raw material expenses. We are also working with our customers to find alternate options for the shipment of products where they control aspects of the logistics process. However, the situation is evolving and shifting rapidly at times, and the success of our efforts to mitigate and address the impacts on our business may not be successful. As a result, we could see increases in our costs or reduced revenue which would impact the level of our earnings in future periods.

Please refer to Part I, Item 1A of our 2021 Form 10-K for further discussion of the risks associated with our business operations, including risks associated with foreign operations.

COVID-19 Pandemic

With respect to the COVID-19 pandemic, we are following the guidance of the CDC and the local regulatory authorities in regions outside the U.S. While in most cases we are no longer requiring employees to wear masks indoors in our domestic locations, we continue to closely monitor the case numbers in individual facilities and have temporarily reinstituted mask requirements when we have deemed it prudent to do so. We are encouraging all employees to receive COVID-19 vaccinations and boosters, if possible. We are continuing to conduct temperature screenings and encouraging all employees to maintain social distancing when appropriate. We are also continuing to allow employees to work remotely either part-time or full-time in circumstances when possible. During April 2022, an increase in COVID-19 cases at one of our facilities resulted in a loss of production time. Additionally, the shutdowns in China required us to find alternate plans for delivery of our products to the country. Although we were able to take actions to lessen the impact of these events on our business, if the spread of COVID-19 or its variants continues to worsen, we may experience additional lost production time or further interruption in our ability to ship our products to our customers. In addition, if one or more of our significant customers or suppliers is impacted, or if significant additional governmental regulations and restrictions are imposed, our business could be negatively impacted in the future. We continue to monitor the situation closely and will adjust our operations as necessary to protect the health and well-being of our employees and to minimize the impact on our business operations. To the extent that further governmental mandates or restrictions are implemented in the future, we currently expect to be able to continue to operate our business in a manner similar to how we have operated over the past two years.

Results of Operations

The results of operations for all of our operating segments are generally affected by the same factors described in the Overview section above. Separate discussions and analyses for each segment would be repetitive. The discussion and analysis that follows, therefore, is presented on a consolidated basis and includes discussion of factors unique to each segment where significant to an understanding of that segment.

Three Months Ended September 30, 2022 Compared to Three Months Ended September 30, 2021

Revenue. Revenue was $30.8 million for the three months ended September 30, 2022 compared to $21.1 million for the same period in 2021, an increase of $9.6 million, or 46%. Revenue attributable to the acquired businesses totaled $4.8 million in the third quarter of 2022. We believe the increase in our revenue during the third quarter of 2022 primarily reflects the factors previously discussed under “Revenue” in the Overview section above.

Gross Margin. Our consolidated gross margin was 45% of revenue for the three months ended September 30, 2022 as compared to 49% of revenue for the same period in 2021. The decrease in our gross margin primarily reflects an increase in our component material costs as a percentage of revenue, reflecting changes in product, customer and sales channel mix.

Selling Expense. Selling expense was $4.0 million for the three months ended September 30, 2022 compared to $2.8 million for the same period in 2021, an increase of $1.2 million, or 41%. The acquired businesses account for approximately $975,000 of this increase. The remaining increase primarily reflects headcount investments across all our segments.

Engineering and Product Development Expense. Engineering and product development expense was $1.9 million for the three months ended September 30, 2022 compared to $1.3 million for the same period in 2021, an increase of $532,000, or 40%. The acquired businesses account for approximately $492,000 of this increase. The remaining increase primarily reflects headcount investments across all our segments.

General and Administrative Expense. General and administrative expense was $4.9 million for the three months ended September 30, 2022 compared to $3.6 million for the same period in 2021, an increase of $1.2 million, or 34%. The acquired businesses account for approximately $1.0 million of this increase. The amount attributable to the acquired businesses includes amortization expense of approximately $300,000 related to acquired intangible assets. The remaining increase primarily reflects headcount investments in our legacy businesses as well as an increase in stock-based compensation expense. These increases were partially offset by a reduction in acquisition related costs, including legal and professional fees, and lower accruals for profit-based bonuses.

Restructuring and Other Charges. For the three months ended September 30, 2021, we recorded $51,000 in restructuring and other charges related to the consolidation of the manufacturing operations in our Electronic Test segment. There were no similar charges in the three months ended September 30, 2022.

Income Tax Expense. For the three months ended September 30, 2022, we recorded income tax expense of $515,000 compared to income tax expense of $357,000 for the same period in 2021. Our effective tax rate was 17% for the three months ended September 30, 2022 compared to 14% for the same period in 2021. On a quarterly basis, we record income tax expense or benefit based on the expected annualized effective tax rate for the various taxing jurisdictions in which we operate our businesses.

Nine Months Ended September 30, 2022 Compared to Nine Months Ended September 30, 2021

Revenue. Revenue was $84.4 million for the nine months ended September 30, 2022 compared to $62.5 million for the same period in 2021, an increase of $21.9 million, or 35%. Revenue attributable to the acquired businesses totaled $14.0 million in the first nine months of 2022. We believe the increase in our revenue during the first nine months of 2022 primarily reflects the factors previously discussed under “Revenue” in the Overview section above.

Gross Margin. Our consolidated gross margin was 46% of revenue for the nine months ended September 30, 2022 as compared to 49% of revenue for the same period in 2021. The decrease in our gross margin primarily reflects an increase in our component material costs as a percentage of revenue, reflecting changes in product, customer and sales channel mix.

Selling Expense. Selling expense was $11.5 million for the nine months ended September 30, 2022 compared to $7.8 million for the same period in 2021, an increase of $3.6 million, or 46%. The acquired businesses account for approximately $2.8 million of this increase. The remaining increase primarily reflects headcount investments and increased travel and advertising costs across all our segments. These increases were partially offset by a decrease in commissions reflecting changes in product, customer and sales channel mix.

Engineering and Product Development Expense. Engineering and product development expense was $5.6 million for the nine months ended September 30, 2022 compared to $4.0 million for the same period in 2021, an increase of $1.6 million or 41%. The acquired businesses account for approximately $1.5 million of this increase. There were no significant changes in the components of expense of our legacy business.

General and Administrative Expense. General and administrative expense was $14.6 million for the nine months ended September 30, 2022 compared to $10.6 million for the same period in 2021, an increase of $4.1 million, or 39%. The acquired businesses account for approximately $3.6 million of this increase. The amount attributable to the acquired businesses includes amortization expense of approximately $1.2 million related to acquired intangible assets. The remaining increase primarily reflects headcount investments, higher levels of professional fees for third-party professionals who assist us with strategic initiatives, investor relations and other regulatory matters and an increase in stock-based compensation expense.

Restructuring and Other Charges. For the nine months ended September 30, 2021, we recorded $303,000 in restructuring and other charges related to the consolidation of the manufacturing operations in our Electronic Test segment and the retirement of our former Chief Financial Officer. There were no similar charges in the nine months ended September 30, 2022.

Income Tax Expense. For the nine months ended September 30, 2022, we recorded income tax expense of $1.0 million compared to income tax expense of $1.2 million for the same period in 2021. Our effective tax rate was 17% for the nine months ended September 30, 2022 compared to 14% for the same period in 2021. On a quarterly basis, we record income tax expense or benefit based on the expected annualized effective tax rate for the various taxing jurisdictions in which we operate our businesses.

Liquidity and Capital Resources

As discussed more fully in the Overview, our business and results of operations are substantially dependent upon the demand for ATE by semiconductor manufacturers and companies that specialize in the testing of ICs. The cyclical and volatile nature of demand for ATE makes estimates of future revenue, results of operations and net cash flows difficult.

Our primary historical source of liquidity and capital resources has been cash flow generated by our operations. In 2021, we also utilized our Credit Facility, which is discussed below, to fund our acquisitions. We manage our businesses to maximize operating cash flows as our primary source of liquidity for our short-term cash requirements, as discussed below. We use cash to fund growth in our operating assets, for new product research and development, for acquisitions and for stock repurchases. We currently anticipate that any additional long-term cash requirements related to our strategy would be funded through a combination of our cash and cash equivalents, our Credit Facility or by issuing equity.

Credit Facility

As discussed in Note 12 to our consolidated financial statements in this Report, on October 15, 2021, we entered into the Loan Agreement with M&T. The Loan Agreement includes a $25 million non-revolving delayed draw term note (the “Term Note”) and a $10 million revolving credit facility (together with the Term Note, the “Credit Facility”). The Credit Facility had a five year contract period that began on the Closing Date and expired on October 15, 2026, and draws under the Term Note were permissible for two years.

On September 20, 2022, we further amended the Loan Agreement by entering into a Third Amendment to Amended and Restated Loan and Security Agreement (the Loan Agreement as amended by the Third Amendment, the “Amended Loan Agreement”) and the Third Amended and Restated Delayed Draw Term Note 1A. Under the Amended Loan Agreement, the maximum loan amount that we may borrow under the Term Note increased from $25 million to $50.5 million, which raises the available funding at September 30, 2022 to $30 million. Under the Amended Loan Agreement, the maturity date of the Term Note and revolving credit facility were also extended to September 19, 2027 (the “Contract Period”). As of September 30, 2022, we had not borrowed any amounts under the revolving credit facility. Our borrowings under the Term Note are discussed below and occurred prior to entering into the Amended Loan Agreement. The principal balance of the revolving credit facility and the principal balance of any amount drawn under the Term Note accrues interest based on the Secured Overnight Financing Rate or a bank-defined base rate plus an applicable margin, depending on leverage. The Amended Loan Agreement includes customary affirmative, negative and financial covenants, including a maximum ratio of consolidated funded debt to consolidated EBITDA and a fixed charge coverage ratio. Our obligations under the Amended Loan Agreement are secured by liens on substantially all of our tangible and intangible assets.

On October 28, 2021, we drew $12 million under the Term Note to finance the acquisition of Videology. We also entered into an interest rate swap agreement with M&T as of this date which is designed to protect us against fluctuations in interest rates during the five-year repayment and amortization period. As a result, the annual interest rate we expect to pay for this draw under the Term Note is fixed at approximately 3.2% based on current leverage.

On December 29, 2021, we drew $8.5 million under the Term Note to finance the acquisition of Acculogic. We did not enter into an interest rate swap agreement with M&T related to this draw. The annual interest rate we expect to pay for this draw under the Term Note is variable. At September 30, 2022 it was approximately 4.4% based on current leverage. Effective October 15, 2022, this rate had increased to approximately 5.2%.

Interest expense for the three and nine months ended September 30, 2022 was $179,000 and $457,000, respectively. There was no interest expense in the three or nine months ended September 30, 2021.

Liquidity

Our cash, cash equivalents, restricted cash and working capital were as follows (in thousands):

	September 30, 2022	December 31, 2021
Cash, cash equivalents and restricted cash	$ 10,038	$ 21,195
Working capital	$ 30,531	$ 27,005

As of September 30, 2022, $3.8 million, or 42%, of our cash and cash equivalents was held by our foreign subsidiaries. We also had $1.1 million of restricted cash that is discussed in Note 2 to our consolidated financial statements in this Report that was held by one of our subsidiaries in the Netherlands. We currently expect our cash and cash equivalents, in combination with the borrowing capacity available under our revolving credit facility and the anticipated net cash to be provided by our operations in the next twelve months to be sufficient to support our short-term working capital requirements and other corporate requirements. Our revolving credit facility is discussed above and in Note 12 to our consolidated financial statements in this Report.

Our material short-term cash requirements include payments due under our various lease agreements, recurring payroll and benefits obligations to our employees, purchase commitments for materials that we use in the products we sell and principal and interest payments on our debt. Over the last nine months, in connection with the increasing level of our backlog, we have made additional investments in inventory which now comprises a greater portion of our total working capital at September 30, 2022 than at December 31, 2021. We also anticipate making investments in our business in the next twelve months including hiring of additional staff, updates to our website and other systems and investments related to our geographic and market expansion efforts. We estimate that our minimum short-term working capital requirements currently range between $8.0 million and $10.0 million. We expect our current cash and cash equivalents, in combination with the borrowing capacity available under our revolving credit facility and the anticipated net cash to be provided by our operations to be sufficient to support these additional investments as well as our current short-term cash requirements.

Our current strategy for growth includes pursuing acquisition opportunities for complementary businesses, technologies or products. As discussed further in the Overview, on October 28, 2021, we acquired substantially all of the assets of Videology and on December 21, 2021, we completed the acquisition of Acculogic. We utilized $20.5 million under the Term Note to finance these acquisitions. As previously discussed, we currently anticipate that any additional long-term cash requirements related to our strategy would be funded through a combination of our cash and cash equivalents, the remaining availability under the Term Note or by issuing equity. The borrowing availability under the Term Note was recently expanded as discussed above and in Note 12 to our consolidated financial statements in this Report.

Cash Flows

Operating Activities. Net cash used in operations during the nine months ended September 30, 2022 was $3.7 million. During this same period, we recorded net earnings of $5.2 million and had non-cash charges of $3.7 million for depreciation and amortization, which included $972,000 of amortization related to our ROU assets. Our operating lease liabilities declined $1.1 million during this period. We recorded $1.4 million for amortization of deferred compensation expense related to stock-based awards and a $1.2 million deferred income tax benefit during this period. During the nine months ended September 30, 2022, accounts receivable increased $4.9 million, reflecting the increase in revenue in the third quarter of 2022 compared to the fourth quarter of 2021, as well as the fact that a significant portion of the revenue recorded during the third quarter of 2022 was shipped in September 2022. Inventories and accounts payable increased $8.5 million and $3.9 million, respectively, also reflecting the increase in business levels. The significant increase in inventory reflects the additional working capital we have invested in the nine months ended September 30, 2022 to support the much higher level of backlog we are carrying at September 30, 2022.

Investing Activities. Net cash used in investing activities for the nine months ended September 30, 2022 was $4.2 million. In April 2022, we used $3.5 million to purchase U.S. treasury bills, which mature in October 2022. During the nine months ended September 30, 2022, we received a refund from the seller of approximately $371,000 of the purchase price for Acculogic. This refund reflects the final post-closing working capital adjustment. During the nine months ended September 30, 2022, purchases of property and equipment were $1.0 million, primarily reflecting leasehold improvements to our facility in Mansfield, Massachusetts for the space that our Videology subsidiary occupied in the second quarter of 2022 and the purchase of new software tools to assist in the consolidation and reporting of our business operations. These purchases were funded using our working capital. We have no significant commitments for capital expenditures for the balance of 2022; however, depending upon changes in market demand or manufacturing and sales strategies, we may make such purchases or investments as we deem necessary and appropriate. These additional cash requirements would be funded by our cash and cash equivalents, anticipated net cash to be provided by operations and our Credit Facility.

Financing Activities. Net cash used in financing activities for the nine months ended September 30, 2022 was $2.8 million. During the nine months ended September 30, 2022, we made principal payments on our Term Note totaling $2.9 million. During this same period we received $148,000 as a result of purchases of our stock that were made by our employees under the ESPP and $38,000 as a result of the exercise of options to purchase our stock by employees. We also acquired $10,000 of stock as a result of shares withheld by us from employees to satisfy tax liabilities incurred by them as a result of vesting of restricted stock awards. These shares are classified as treasury stock on our consolidated balance sheets.

New or Recently Adopted Accounting Standards

See the Notes to our consolidated financial statements in this Report for information concerning the implementation and impact of new or recently adopted accounting standards.

Critical Accounting Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to inventories, long-lived assets, goodwill, identifiable intangibles, contingent consideration liabilities and deferred income tax valuation allowances. We base our estimates on historical experience and on appropriate and customary assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Some of these accounting estimates and assumptions are particularly sensitive because of their significance to our consolidated financial statements and because of the possibility that future events affecting them may differ markedly from what had been assumed when the financial statements were prepared. As of September 30, 2022, there have been no significant changes to the accounting estimates that we have deemed critical. Our critical accounting estimates are more fully described in our 2021 Form 10-K.

Off -Balance Sheet Arrangements

There were no off-balance sheet arrangements during the nine months ended September 30, 2022 that have or are reasonably likely to have, a current or future effect on our financial condition, changes in financial condition, revenue or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to our interests.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

This disclosure is not required for a smaller reporting company.

Item 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as such term is defined in Rule 13a-15(e) under the Exchange Act. Because there are inherent limitations in all control systems, a control system, no matter how well conceived and operated, can provide only reasonable, as opposed to absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Our management, including the CEO and CFO, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all error and all fraud. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Accordingly, our management has designed the disclosure controls and procedures to provide reasonable assurance that the objectives of the control system were met.

CEO/CFO Conclusions about the Effectiveness of the Disclosure Controls and Procedures. As required by Rule 13a-15(b) of the Exchange Act, inTEST management, including our CEO and CFO, conducted an evaluation as of the end of the period covered by this Report, of the effectiveness of our disclosure controls and procedures**.** Based on that evaluation, our CEO and CFO concluded that, as of the end of the period covered by this Report, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the period covered by this Report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. LEGAL PROCEEDINGS

From time to time we may be a party to legal proceedings occurring in the ordinary course of business. We are not currently involved in any material legal proceedings.

Item 1A. RISK FACTORS

Information regarding the primary risks and uncertainties that could materially and adversely affect our future performance or could cause actual results to differ materially from those expressed or implied in our forward-looking statements, appears in Part I, Item 1A - "Risk Factors" of our 2021 Form 10-K filed with the Securities and Exchange Commission on March 23, 2022. There have been no material changes from the risk factors set forth in our 2021 Form 10-K.

Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

Item 3. DEFAULTS UPON SENIOR SECURITIES

None.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

Item 5. OTHER INFORMATION

None.

Item 6. EXHIBITS

10.1 Third Amendment to Amended and Restated Loan and Security Agreement, dated September 20, 2022, among inTEST Corporation, Ambrell Corporation, inTEST Silicon Valley Corporation, inTEST EMS, LLC, Temptronic Corporation, Videology Imaging Corporation, Acculogic Ltd., Acculogic Inc. and M&T Bank. (1)
10.2 Third Amended and Restated Delayed Draw Term Note 1A, dated September 30, 2022. (1)
31.1 Certification of Chief Executive Officer pursuant to Rule 13a-14(a).
31.2 Certification of Chief Financial Officer pursuant to Rule 13a-14(a).

32.1	Certification of Chief Executive Officer furnished pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer furnished pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Taxonomy Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

(1) Previously filed by the Company as an exhibit to the Company's Current Report on Form 8-K dated September 20, 2022, File No. 001-36117, filed September 26, 2022, and incorporated herein by reference.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

inTEST Corporation

Date: November 14, 2022

/s/ Richard N. Grant, Jr.
Richard N. Grant, Jr.
President and Chief Executive Officer

Date: November 14, 2022

/s/ Duncan Gilmour
Duncan Gilmour
Chief Financial Officer, Treasurer and Secretary

EXHIBIT 31.1

CERTIFICATION

I, Richard N. Grant, Jr., certify that:

1. I have reviewed this quarterly report on Form 10-Q of inTEST Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 14, 2022

/s/ Richard N. Grant, Jr.
Richard N. Grant, Jr.
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Duncan Gilmour, certify that:

1. I have reviewed this quarterly report on Form 10-Q of inTEST Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 14, 2022

/s/Duncan Gilmour
Duncan Gilmour
Chief Financial Officer, Treasurer and Secretary

EXHIBIT 32.1

inTEST CORPORATION

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of inTEST Corporation (the "Company") on Form 10-Q for the period ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard N. Grant, Jr., President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 14, 2022

/s/ Richard N. Grant, Jr.
Richard N. Grant, Jr.
President and Chief Executive Officer

EXHIBIT 32.2

inTEST CORPORATION

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of inTEST Corporation (the "Company") on Form 10-Q for the period ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Duncan Gilmour, Chief Financial Officer, Treasurer and Secretary of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 14, 2022

/s/ Duncan Gilmour
Duncan Gilmour
Chief Financial Officer, Treasurer and Secretary