

CREDIT OPINION

17 March 2021

Update

 Rate this Research

RATINGS

thyssenkrupp AG

Domicile	Essen, Germany
Long Term Rating	B1
Type	LT Corporate Family Ratings
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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thyssenkrupp AG

Update following outlook change to stable

Summary

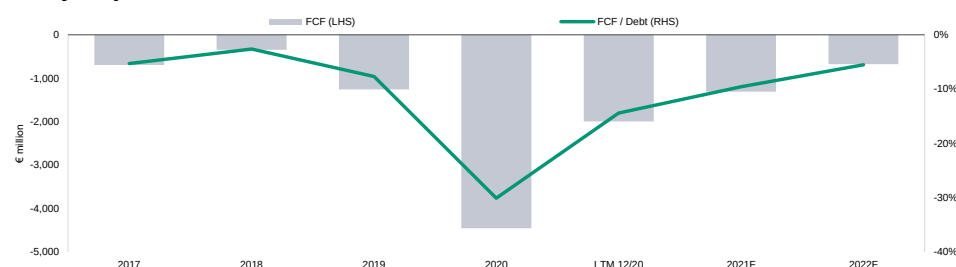
On 15 March 2021, we affirmed [thyssenkrupp AG's](#) (tk) B1 corporate family rating (CFR) and changed the outlook to stable from developing. The affirmation followed the group's decision to develop its Steel Europe (SE) business area on its own. This decision removes uncertainty over the group's near-term strategy, which we had reflected in the previously developing outlook. While extensive restructuring will continue to burden tk's earnings and cash flows this and next year, we expect its credit metrics to gradually strengthen over the next two to three years on the back of an improved operating environment as well as the realisation of efficiency improvements.

Credit strengths incorporated in the rating reflect the group's significant scale, global footprint and diversified revenue streams; strong liquidity profile, underpinned by a cash balance of €10.6 billion and largely available credit lines as of 31 December 2020; expected improving market conditions and demand in key end-markets in 2021, which have been hit by the coronavirus pandemic last year; a strategy focused on turning around profitability and improving cash flow in all segments; and its strong liquidity profile.

The rating remains constrained by tk's exposure to mostly cyclical industries, such as the automotive sector (around 30% of group sales), which materially increased after the disposal of its elevator business in July 2020; a high share of earnings and cash flows that are sensitive to volatile steel and raw material prices; extensive ongoing restructuring, which still needs to yield the targeted profitability improvements and positive free cash flow (FCF) that has been highly negative during the last few years.

Exhibit 1

We expect tk's negative FCF to improve over the next two years Moody's-adjusted FCF and FCF/Debt



Source: Moody's Investors Service

Credit strengths

- » Large size and a diversified product portfolio
- » A reported net cash position of more than €5 billion as of 31 December 2020 and strong liquidity profile following the sale of the elevator business
- » A strategy focused on improving profitability and returning to positive FCF

Credit challenges

- » Weak profitability
- » Large-scale restructuring, which continues to weigh on profitability and cash flows
- » A high share of revenues from cyclical end-markets (automotive, engineering, steel processing, trading)

Rating outlook

The stable outlook reflects our expectation of a progressive strengthening in tk's credit metrics and its FCF to reach break-even over the next two to three years. It further incorporates tk's strong liquidity profile and an expected prudent financial policy with a focus on deleveraging, but also in the context of possible additional portfolio adjustments.

Factors that could lead to an upgrade

We would consider upgrading the ratings, if tk

- » improves its profitability towards a 4% Moody's-adjusted EBITA margin,
 - » reduces its Moody's-adjusted gross leverage towards 5.0x,
 - » returns to positive FCF,
 - » maintains its strong liquidity, while a sizeable cash buffer is retained to accommodate expected persistent high cash needs,
- all on a sustained basis.

For a positive rating action, we would also evaluate the implications of expected ongoing portfolio adjustments.

Factors that could lead to a downgrade

We could downgrade the ratings if tk's

- » Moody's-adjusted EBITA margin does not recover to at least 1.5% by fiscal 2022,
- » leverage remains above 4.0x Moody's-adjusted net debt/EBITDA until fiscal 2022,
- » negative FCF could not be reduced towards breakeven by fiscal 2023,
- » currently strong liquidity weakens significantly.

Negative rating pressure could also build from a possible shift towards a more shareholder-oriented financial policy.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

thyssenkrupp AG [1]

	Sep-16	Sep-17	Sep-18	Sep-19	Sep-20	Dec-20
Revenue (USD billion)	\$42.2	\$45.8	\$49.4	\$38.4	\$32.4	\$32.6
EBITA Margin %	3.5%	3.6%	2.8%	-1.0%	-7.5%	-6.7%
EBITA / Interest Expense	2.7x	2.5x	2.2x	-0.6x	-3.4x	-3.0x
Debt / EBITDA	5.4x	4.7x	5.2x	16.5x	-14.5x	-16.5x
RCF / Net Debt	14.1%	25.9%	14.8%	7.8%	-26.7%	-8.9%
FCF / Debt	-0.4%	-6.1%	-2.6%	-7.7%	-30.1%	-14.4%

[1] All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

Source: Moody's Financial Metrics™

Profile

Germany-based thyssenkrupp AG is a diversified industrial conglomerate operating in around 60 countries. In the 12 months ended 31 December 2020, tk reported revenue of €29 billion and negative company-adjusted EBIT of €1.5 billion from continuing operations with around 103,000 employees as of 31 December 2020.

The group is active in capital goods manufacturing through its Marine Systems (MS), Automotive Technology (AT) and Industrial Components (IC) segments, and steel manufacturing and steel-related services through Steel Europe (SE) and Materials Services (MX). In 2019/2020, the group segmented certain weak-performing business units as "Multi-Tracks" (MT) (for disposal, discontinuation, restructuring or continuation in partnership) while maintaining a focus on the MX, AT and IC segments.

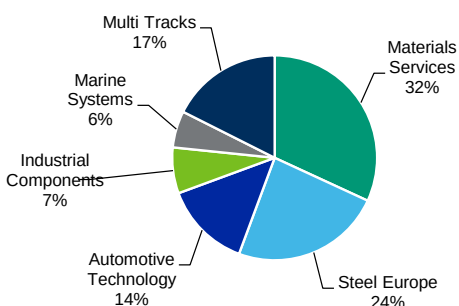
In the 12 months ended 31 December 2020, steel manufacturing and steel-related services represented around 56% of the group's total sales (before intragroup eliminations), the capital goods businesses represented 27% and the MT business generated 17% of total sales.

On 31 July 2020, tk sold its Elevator Technology division to a consortium of private-equity firms led by Advent International and Cinven for a purchase price of around €17 billion. tk, through a €1.25 billion reinvestment, retained an around 19% stake in the business.

Exhibit 3

Sales by segment

LTM ended 31 December 2020

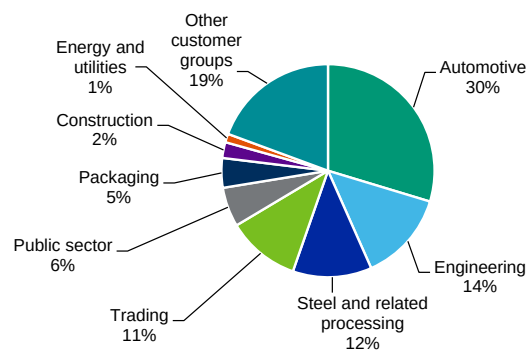


Source: Company's filings

Exhibit 4

Sales by customer group

Fiscal 2019-20



Note: Only for continuing operation

Source: Company's filings

tk's shareholder structure has been relatively stable over the last six years. The group's largest shareholders are the Alfried Krupp von Bohlen und Halbach Foundation, which holds around 21% of the voting rights, and Cevian Capital AB, which has a stake of around 15%. As of 10 March 2021, tk had a market capitalisation of around €7.3 billion.

Detailed credit considerations

Decision of a stand-alone development of the steel business should provide strategic certainty for the next two years

On 10 March 2021, tk announced the decision to continue to develop its steel operations on its own after terminating discussions with Liberty Steel Group on a possible sale of the business in February 2021. The plan to retain SE eliminates the previous significant uncertainty around the future of the segment but also that of tk's business profile as a whole, which we incorporated in our assessment before changing the outlook to stable from developing on 15 March 2021. At the same time, the group announced to intensify the restructuring of SE to sustainably improve its profitability and competitiveness and to prepare it for an independent future (e.g. a possible spin-off) in the coming years. To achieve this, an additional up to 750 headcount reduction (on top of the already targeted 3,000) until September 2023 was agreed with labor unions in March 2021.

With the decision to proceed with its Steel Strategy 20-30, tk remains exposed to SE's mostly cyclical end-markets (e.g. automotive, construction) and susceptibility to volatile steel prices and feedstock costs. After the exceptionally challenging fiscal 2020 (€946 million negative company-adjusted EBIT at SE), however, we expect a recovering global economy and the recent surge in steel prices to bode well for significant performance improvements this year. We also positively note the group's recent guidance update, including EBIT at SE to reach break-even in fiscal 2021, which we consider as achievable in light of the expected market recovery.

Operational difficulties and restructuring continue to limit visibility into a near-term performance turnaround

While recognizing tk's better than expected Q1 fiscal 2021 results and expecting further sequential improvements through the remainder of this year, the group continues to face operational challenges that it needs to tackle in the coming years. This is reflected in tk's negative company-adjusted EBIT from continuing operations of €1.5 billion as of LTM ended 31 December 2020 (€110 million negative in fiscal 2019), with the year-over-year decline being mainly driven the pandemic-induced slump in demand and a marked contraction in steel spreads at SE.

That said, in February 2021 tk raised its earnings guidance for fiscal 2021 and now forecasts almost break-even EBIT versus a negative mid three-digit million euro figure previously. Increasing shipments, coupled with higher steel prices as well as incremental benefits from implemented restructuring should strengthen tk's operating performance in the next few quarters, in our view. However, visibility into the success of its extensive restructuring (e.g. to reduce the headcount by 11,750 by fiscal 2023) are limited and the targeted performance improvements still need to be delivered.

Nevertheless, we acknowledge tk's strategy with a focus on improving the operating performance and reduce costs across all divisions and advancing with its restructuring and the gradual disposal, discontinuation, restructuring or continuation in partnership of its weakly performing "Multi-Tracks" businesses.

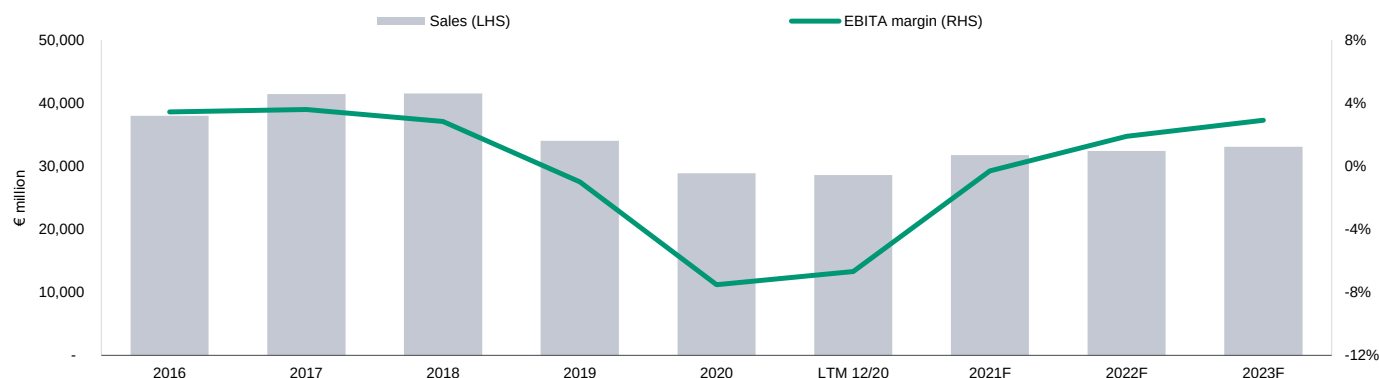
Improving profitability remains a key challenge and prerequisite for a higher rating

tk's profitability has been weak historically and contracted further with the economic slowdown since late 2019, the pandemic-driven demand weakness, higher restructuring costs and the de-consolidation of its profitable elevator business in 2020. As a result, tk's Moody's-adjusted EBITA margin dropped to -7.5% in fiscal 2020 from -1% and 2.8% in fiscal 2019 and 2018, respectively. The only segments that positively contributed to tk's company-adjusted EBIT in fiscal 2020 were IC and MS, whereas all other segments incurred high losses.

In Q1 fiscal 2021, tk's results started to improve against a rebound in demand in key-end markets, importantly the automotive industry, which accounts for more than 30% of group sales. Besides the uptick in demand, tk's better earnings (€11 million positive Moody's-adjusted EBITA) also benefitted from restructuring related cost savings, especially at the AT, IC and SE segments. In the last 12 months ended 31 December 2020, however, tk's Moody's-adjusted EBITA margin of -6.7% (after restructuring costs) remained clearly behind our minimum 1.5% margin requirement for a B1 rating.

Whilst committed to ongoing large-scale restructuring, disposal, discontinuation or continuation in partnership of its MT businesses should enable tk to significantly strengthen its profitability over the next three years. Although execution risks and uncertainty regarding the targeted cost savings remain, we expect tk's Moody's-adjusted EBITA margin to gradually improve towards 2% in fiscal 2022 and 3% in fiscal 2023. These levels will be well in line with our expectations for a B1 rating, but further improvements (towards 4%) would be needed for a higher rating. While recognizing the group's ambition to meet our margin requirement for a Ba3 rating by fiscal 2023, visibility into sustainable profitability levels in the foreseeable future remains very limited at this point.

Exhibit 5

We forecast tk's profitability to improve on an expected market recovery in 2021 and restructuring

Sources: Company's filings and Moody's Financial Metrics™

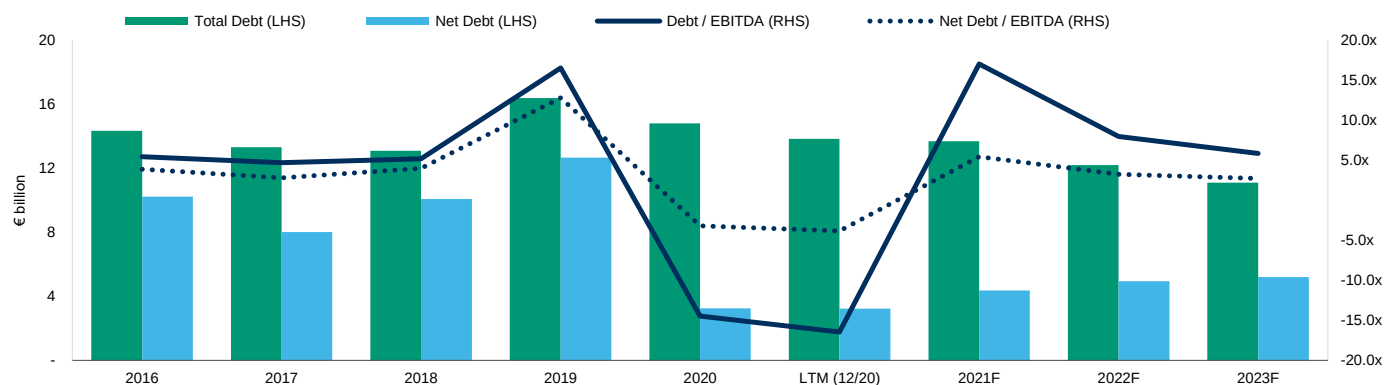
FCF will likely remain negative for the next two years, but leverage decline on higher earnings and debt repayments from available cash

tk's persistent negative Moody's-adjusted FCF has reached a record low in fiscal 2020, amounting to negative €4.5 billion or a €5.1 billion drain, excluding the discontinued elevator business. Although significant negative one-off effects, such as the termination of working capital measures (up to €3 billion), a €370 million cartel fine and around €200 million of restructuring cash costs, contributed to the cash burn, FCF excluding these items still clearly weakened against the negative €1.3 billion Moody's-adjusted FCF in fiscal 2019.

In Q1 fiscal 2021, tk's reported FCF before M&A increased strongly to €32 million from negative €2.4 billion in the prior year (including the cartel fine payment) due to improving funds from operating operations (FFO) and a sizeable working capital reduction. Against the stronger than anticipated performance recovery in Q1, tk revised upwards its guidance for FCF before M&A in fiscal 2021 towards negative €1 billion versus negative €1.5 billion before. Nevertheless, its Moody's-adjusted FCF remains highly negative at €2.0 billion as of LTM ended 31 December 2020 and we expect the cash consumption to persist, although sequentially reduce towards break-even (assuming no dividend payments), over the next three years.

That said, we take comfort from tk's sizeable cash balance of €10.6 billion as of 31 December 2020, which helps cushion the ongoing cash drain and which we expect tk to use mainly for upcoming debt maturities. Combined with forecast growth in tk's Moody's-adjusted EBITDA towards €2 billion by fiscal 2023, we expect its leverage to decline to well below 6x Moody's-adjusted gross debt / EBITDA or below 3x on a net debt basis over the next two and a half years. While (gross) leverage will remain high for the assigned B1 rating, we take into account tk's high cash balance and pension obligations, which will represent an increasing share of tk's total Moody's-adjusted debt (up to 75% by fiscal 2023, assuming no earlier pre-funding).

Exhibit 6

Leverage will gradually decline driven by earning growth and debt repayments

Source: Company's filings and Moody's Financial Metrics™

The disposal of the elevator business significantly strengthened tk's balance sheet and liquidity, but weakened its business profile

After the sale of the elevator business in July 2020, which resulted in around €15 billion net financial debt reduction (net of a €1.25 billion reinvestment by tk) and a reported €5.1 billion net cash position as of 31 December 2020, tk's balance sheet has significantly strengthened. Considering a cash position of around €10.6 billion and committed credit lines of €1.5 billion available at the same date, we regard tk's liquidity as strong, which was strained before the disposal against an increasing cash burn during the last two years.

The significant cash proceeds enable tk to fund its ongoing negative FCF, including additional sizeable restructuring cash costs over the next two years, and gradually reduce debt. Given that the visibility into future cash needs is still relatively limited, we recognise the group's current preference to maintain a high cash balance to protect its liquidity, before considering other uses, such as a (partial) funding of its large pension deficit (€8.3 billion as of the end of September 2020) or voluntary debt repayments. Such measures are positive for tk's credit metrics and financial policy. The B1 rating does not incorporate the potential use of cash for larger acquisitions or shareholder distributions, which we understand are not considered by management at present.

However, the sale of the elevator division, which had been tk's most stable, profitable and cash-generative business, has weakened its business profile, which is now dominated by lower-margin activities such as the steel and materials businesses with high exposure to cyclical end-markets (for example, automotive, engineering, construction) and typically volatile steel and raw material prices.

Environmental, social and governance considerations

As one of the leading steelmakers in Europe, tk faces high environmental risks, mainly related to air pollution and carbon dioxide (CO₂) emissions. As we expect emission allowances in Europe to tighten over the next few years, companies with an insufficient coverage of free allowances will likely see carbon costs increase. We believe tk is sufficiently covered with CO₂ emission rights, although the group does not disclose any detailed information on this matter.

With its Carbon2Chem project (German state funded), tk plans to chemically convert CO₂ from steel mill gases into ammonia, which is used in the production of artificial fertilisers. The group is further developing cleaner steel production by replacing coking coal with hydrogen at one blast furnace in Duisburg. These plans and the ambition to reduce its combined greenhouse gas emissions by 30% by 2030 reflect tk's high awareness of the increasing relevance of environmental matters in its industry.

The key governance aspects for tk include its diverse shareholder base, including the Alfried Krupp von Bohlen und Halbach Foundation (21% of voting rights) and the Swedish investment firm Cevian Capital (around 15%). The partly diverging strategic interests of these parties had created an environment of difficult and lengthy decision-making in the past, although we believe this risk has somewhat softened after the disposal of the elevator business.

In our view, the social considerations most relevant for tk are health and safety, which we understand is a key priority for the group; and a high risk of strikes, with most of tk's German workforce being organised in unions, which are particularly relevant amid the current evaluation of significant organisational changes, including a potential lay off of around 11,750 employees.

Liquidity analysis

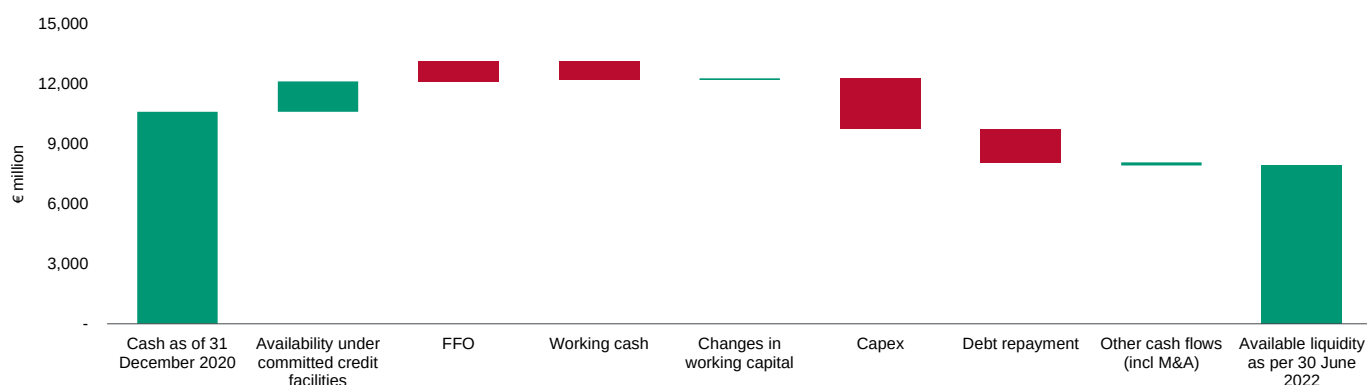
tk benefits from a sound liquidity profile, which materially strengthened after the sale of the elevator business in July 2020 and strongly supports its rating. The €10.6 billion cash position and €1.5 billion of available committed credit lines as of 31 December 2020 provide significant capacity for the group to fund our forecast of nearly €2 billion cumulative negative FCF and debt maturities of €1.7 billion (excluding leases) over fiscal 2021 - fiscal 2022.

Asset disposals in the group's Multi-Tracks segment, including its around 19% retained stake in the sold elevator business, appear likely and could lead to additional cash inflows in the next 12-18 months. However, such disposals are only qualitatively included in our liquidity assessment as no binding offers have been received so far.

After the termination of a €2 billion syndicated credit facility in September 2020, tk is not required to comply with any maintenance covenants.

Exhibit 7

tk's sizeable cash position will comfortably cover expected negative FCF and debt maturities in the next 18 months



Sources: Company information and Moody's Investors Service

Methodology and scorecard

The principal methodology used in rating tk is our [Manufacturing Methodology](#) (March 2020), which can be found on www.moody's.com. The forward scorecard-indicated outcome of Ba3 is one notch above the assigned rating. The difference is mainly explained by tk's high exposure to cyclical end-markets and weak point-in-time credit metrics.

Exhibit 8

Rating factors thyssenkrupp AG

Manufacturing Industry Scorecard [1][2]			Current LTM 12/31/2020		Moody's 12-18 Month Forward View As of 3/11/2021 [3]	
Factor 1 : Scale (20%)	Measure	Score			Measure	Score
a) Revenue (USD Billion)	\$32.6	Aa			\$38 - \$40	Aa
Factor 2 : Business Profile (25%)						
a) Business Profile	Ba	Ba			Ba	Ba
Factor 3 : Profitability and Efficiency (5%)						
a) EBITA Margin	-6.7%	Ca			0% - 2%	Caa
Factor 4 : Leverage and Coverage (35%)						
a) Debt / EBITDA	-16.5x	Ca			8x - 10x	Ca
b) Retained Cash Flow / Net Debt	-8.9%	Ca			15%-20%	Ba
c) Free Cash Flow / Debt	-14.4%	Ca			"-7%" - "-5%"	Ca
d) EBITA / Interest Expense	-3.0x	Ca			0x - 1.5x	Caa
Factor 5 : Financial Policy (15%)						
a) Financial Policy	Ba	Ba			Ba	Ba
Rating:						
a) Scorecard-Indicated Outcome		B1				Ba3
b) Actual Rating Assigned						B1

[1] All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] As of 12/31/2020(L).

[3] This represents Moody's forward view, not the view of the issuer.

Source: Moody's Financial Metrics™

Appendix

Exhibit 9

Peer comparison [1]

	thyssenkrupp AG B1 Stable			Timken Company (The) Baa3 Positive			CNH Industrial N.V. Baa3 Stable			ArcelorMittal Ba1 Stable			Schaeffler AG Ba1 Stable			Ryerson Holding Corporation B2 Stable		
(in USD million)	FYE Sep-19	FYE Sep-20	LTM Dec-20	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-18	FYE Dec-19	LTM Jun-20	FYE Dec-18	FYE Dec-19	LTM Sep-20	FYE Dec-18	FYE Dec-19	LTM Sep-20	FYE Dec-18	FYE Dec-19	FYE Dec-20
Revenue	\$38,393	\$32,364	\$32,632	\$3,581	\$3,790	\$3,513	\$27,831	\$26,149	\$23,218	\$76,033	\$70,615	\$54,600	\$16,817	\$16,151	\$14,064	\$4,408	\$4,502	\$3,467
EBITDA	\$1,117	-\$1,144	-\$959	\$677	\$771	\$700	\$2,736	\$2,392	\$1,333	\$10,573	\$3,941	\$1,800	\$2,663	\$1,995	\$887	\$235	\$277	\$152
Total Debt	\$17,865	\$17,353	\$16,930	\$1,580	\$1,868	\$2,153	\$6,948	\$7,284	\$8,894	\$25,536	\$27,778	\$27,372	\$6,837	\$6,963	\$8,087	\$1,472	\$1,304	\$1,034
Cash & Cash Equivalents	\$4,048	\$13,550	\$12,983	\$133	\$210	\$320	\$4,553	\$4,407	\$4,638	\$2,172	\$4,867	\$6,617	\$482	\$286	\$9	\$23	\$11	\$61
EBITDA margin	-1.0%	-7.5%	-6.7%	15.3%	16.8%	15.8%	5.8%	5.3%	1.7%	9.7%	1.4%	-2.1%	9.7%	5.9%	-1.4%	3.8%	4.7%	2.5%
EBITDA / Int. Exp.	-0.6x	-3.4x	-3.0x	8.3x	7.6x	7.2x	3.2x	3.5x	1.0x	7.3x	1.1x	-1.5x	6.2x	4.8x	-0.9x	1.4x	1.9x	1.0x
Debt / EBITDA	16.5x	-14.5x	-16.5x	3.0x	2.6x	2.6x	2.5x	3.0x	6.7x	2.4x	7.0x	15.2x	2.7x	3.5x	8.7x	6.3x	4.7x	6.8x
RCF / Net Debt	7.8%	-26.7%	-8.9%	21.8%	26.3%	26.0%	89.2%	69.1%	27.6%	36.7%	14.4%	9.9%	26.3%	17.5%	3.1%	9.2%	15.1%	7.0%
FCF / Debt	-7.7%	-30.1%	-14.4%	6.7%	17.0%	20.2%	5.7%	-1.6%	-5.8%	2.9%	7.7%	10.4%	-0.5%	1.6%	4.0%	3.0%	12.0%	23.4%

[1] All figures and ratios are calculated using Moody's estimates and standard adjustments. FYE = Financial year-end. LTM = Last 12 months. RUR* = Ratings under review, where UPG = for upgrade and DNG = for downgrade.

Source: Moody's Financial Metrics™

Exhibit 10

Historical Moody's-adjusted debt breakdown [1]

thyssenkrupp AG

(in EUR million)	FYE Sep-16	FYE Sep-17	FYE Sep-18	FYE Sep-19	FYE Sep-20	LTM Dec-20
As Reported Debt	7,612	7,256	5,376	7,415	6,502	5,557
Pensions	5,408	4,808	6,523	7,616	8,274	8,274
Operating Leases	1,062	1,020	924	1,093	0	0
Securitizedizations	237	212	248	246	6	6
Non-Standard Adjustments	15	16	18	17	16	0
Moody's-Adjusted Debt	14,334	13,312	13,089	16,387	14,798	13,837

[1] All figures and ratios are calculated using Moody's estimates and standard adjustments. FYE = Financial year-end. LTM = Last 12 months. RUR* = Ratings under review, where UPG = for upgrade and DNG = for downgrade.

Source: Moody's Financial Metrics™

Exhibit 11

Historical Moody's-adjusted EBITDA breakdown [1]

thyssenkrupp AG

(in EUR million)	FYE Sep-16	FYE Sep-17	FYE Sep-18	FYE Sep-19	FYE Sep-20	LTM Dec-20
As Reported EBITDA	2,332	2,255	2,030	602	(1,274)	(1,070)
Pensions	9	(11)	1	16	(26)	(26)
Operating Leases	354	340	307	311	0	0
Securitizedizations	2	2	2	2	1	1
Unusual	(16)	256	205	65	281	259
Non-Standard Adjustments	(46)	(15)	(15)	(6)	(4)	(4)
Moody's-Adjusted EBITDA	2,635	2,827	2,530	990	(1,022)	(841)

[1] All figures and ratios are calculated using Moody's estimates and standard adjustments. FYE = Financial year-end. LTM = Last 12 months. RUR* = Ratings under review, where UPG = for upgrade and DNG = for downgrade.

Source: Moody's Financial Metrics™

Exhibit 12

Historical Moody's-adjusted financial data
thyssenkrupp AG

EUR million	FYE Sep-16	FYE Sep-17	FYE Sep-18	FYE Sep-19	FYE Sep-20	LTM Dec-20
INCOME STATEMENT						
Revenue	38,000	41,447	41,534	34,036	28,899	28,591
EBITDA	2,635	2,827	2,530	990	(1,022)	(841)
EBIT	1,312	1,473	1,182	(336)	(2,173)	(1,911)
Interest Expense	485	581	545	573	633	644
BALANCE SHEET						
Cash & Cash Equivalents	4,111	5,298	3,012	3,713	11,555	10,611
Total Debt	14,334	13,312	13,089	16,387	14,798	13,837
Net Debt	10,223	8,014	10,077	12,674	3,243	3,226
CASH FLOW						
Funds from Operations (FFO)	1,566	2,197	1,618	1,135	(826)	(252)
Cash Flow From Operations	1,610	1,135	1,420	354	(2,935)	(539)
Capital Expenditures	(1,542)	(1,828)	(1,632)	(1,465)	(1,477)	(1,421)
Dividends	120	122	131	148	40	36
Free Cash Flow (FCF)	(52)	(815)	(343)	(1,259)	(4,452)	(288)
Retained Cash Flow (RCF)	1,446	2,075	1,487	987	(866)	-2.1%
RCF / Debt	10.1%	15.6%	11.4%	6.0%	-5.9%	(1,996)
FCF / Debt	-0.4%	-6.1%	-2.6%	-7.7%	-30.1%	-14.4%
PROFITABILITY						
EBIT margin %	3.5%	3.6%	2.8%	-1.0%	-7.5%	-6.7%
EBITDA margin %	6.9%	6.8%	6.1%	2.9%	-3.5%	-2.9%
INTEREST COVERAGE						
EBIT / Interest Expense	2.7x	2.5x	2.2x	-0.6x	-3.4x	0.6x
EBITDA / Interest Expense	5.4x	4.9x	4.6x	1.7x	-1.6x	-3.0x
(EBITDA - CAPEX) / Interest Expense	1.7x	2.3x	1.7x	-0.8x	-3.9x	-1.3x
LEVERAGE						
Debt / EBITDA	5.4x	4.7x	5.2x	16.5x	-14.5x	-16.5x
Net Debt / EBITDA	3.9x	2.8x	4.0x	12.8x	-3.2x	-3.8x

Source: Moody's Financial Metrics™

Ratings

Exhibit 13

Category	Moody's Rating
THYSSENKRUPP AG	
Outlook	Stable
Corporate Family Rating	B1
Senior Unsecured	B1/LGD4
Commercial Paper -Dom Curr	NP
Other Short Term -Dom Curr	(P)NP

Source: Moody's Investors Service

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