

AMM MIDWEST FERROUS SCRAP INDEXES

Beginning June 11, 2012, AMM began publishing a new Midwest Ferrous Scrap Index for three grades: No. 1 heavy melting scrap, No. 1 busheling and shredded steel scrap. The new Index will be published online at 4 p.m. on the 10th of each month or—if the 10th falls on a public holiday or weekend—on the next working day, as well as in the daily paper the following day. The Index will run in addition to the existing appraised ferrous scrap prices for U.S. and Canadian cities and will be calculated based on transaction data received that is then tonnage-weighted and normalized to produce a final Index value. Detailed documentation relating to our Index methodology is below.

AMMU.S. Midwest Ferrous Scrap Index Methodology Guide

AMM is the leading independent supplier of market intelligence and pricing to the North American metals industries and publisher of the widely-used reference prices for scrap.

AMM's U.S. Midwest Ferrous Scrap Index builds upon the publication's extensive experience in reporting scrap prices in a wide range of grades and locations, and utilizes an established and leading index methodology.

AMMU.S. Midwest Ferrous Scrap Index

The AMMU.S. Midwest Ferrous Scrap Index has been developed to provide a fair, transparent and objective representation of the market.

The AMM Index methodology is a tonnage-weighted calculation of transactions that have been normalized to our base specification using value-in-use (VIU) curves as defined by the market.

Our methodology aims to use the input of high-quality data. AMM has been reporting on the U.S. scrap market for over 100 years and, therefore, has a unique level of experience and knowledge in providing benchmark prices to the industry.

The Index is based on actual transactions, which are reported to AMM by any market participant who is conducting trades on a delivered Midwest mill basis, and is not restricted to a panel or selected group.

The AMMU.S. Midwest Ferrous Scrap Index also utilizes aggregate transaction data, where available, in order to maximize the proportion of the market represented in the final Index.

AMM is impartial and has no financial or other interest in the level or direction of the Index. AMM will not pay any market player to participate in the Index.

AMMU.S. Midwest Ferrous Scrap Index Specifications

The details below are the base specification. The Index is quoted in US\$ per gross ton, delivered to the mill, and is calculated for three grades: No. 1 heavy melting scrap, No. 1 busheling and shredded steel scrap. The grades are based on Institute of Scrap Recycling Industries (ISRI) specifications from 2012.

Trades in similar grades are normalized back to the base specification to reflect the whole market and to increase liquidity in the calculation.

The trades are normalized using the value-in-use of the different grades as defined by the market itself and are updated on a regular basis as the market movements dictate. In addition, where there is variation in other contract terms, such as a difference in pricing terms, these are adjusted back to the base specification.

Index calculation

The Index consists of two sub-indices, based on data received from sellers and buyers of scrap.

The sub-indices are each based on a tonnage-weighted average of the normalized trade information, and the two indices are combined with equal weighting to ensure that the market is fairly represented across all participants. Only the final Index is published.

Data quality and verification

All data points that vary by more than 4 percent from the calculated Index are excluded and the Index recalculated to a single iteration. Outliers can be investigated and attempts to influence the Index unfairly will result in the data provider being warned or excluded.

In some cases, where prices appear out of line or anomalous, participants may be asked to provide evidence of the transaction in the form of a signed contract. Participants will have the right to decline to provide this and AMM will have the right to exclude prices that cannot be substantiated.

The number of trades available for use in the Index does, of course, vary depending on the market conditions prevailing, but AMM seeks to utilize as many trades as possible.

Where insufficient transactions have taken place in the market, defined as less than 20 percent of the average monthly market volumes over the past 12 months, AMM reserves the right to include assessments, bids and offers from market participants in the Index calculation.

Material of all origin is included in the calculation with no sources specifically excluded. However, the origin may have an influence on the normalization coefficients used, if appropriate to the grade.

Data is submitted in a secure manner by phone and e-mail survey

In its attempts to collect as much data from the market as possible, AMM will use the means that best suit the prevailing market environment. If specific transaction information is not available on an individual basis, AMM will accept aggregated purchasing or sales information as a single data point. This is provided the source indicates the average price received or paid for a total tonnage and assuming that all contract details are clear including payment terms and timings for normalization.

Midwest Ferrous Scrap Index

(in dollars per gross ton, evaluated 10/12/15)

No. 1 heavy melt	\$165.27
No. 1 busheling	\$184.36
Shredded steel scrap	\$180.57

All correspondence is stored by AMM. The data collection and Index calculation process will be made available for audit by a recognized and accepted third-party auditor.

Index publication

The Index is published on the 10th of each month at 4 p.m. EST from our New York office. All data must be received by 12 p.m. EST on the 10th. Any data received after 12 p.m. EST on the day of publication will not be included in the Index calculation.

In the event of the 10th of the month falling on a public holiday or weekend, the Index will be published on the following working day. While the index will typically be published by AMM's New York office, AMM and its parent organization maintain offices in a number of locations and can publish the index from any of them as circumstances dictate.

AMM reserves the right to change the publication frequency according to market requirements.

Security of data

AMM stores the collected data and calculation process on secure off-site servers that are backed up on a daily basis. The data is not accessible to parties outside AMM or the group, and internally only to defined individuals within the Index and editorial teams.

If required, the Index calculation process is auditable by a recognized and mutually acceptable third-party auditor according to legal requirements and under non-disclosure agreements.

Why is the Index calculation split into buyers and sellers?

The AMM methodology is designed specifically, and uniquely, to balance out any bias in the market to create the most representative and objective price. The Index is split into the two groups of buyers and sellers to balance a number of factors, including tonnage bias, where more transactions are reported by one side or the other.

In this case, if more tonnage is reported on one side, it will contribute to the accuracy of the sub-index, but it does not over influence the market as it will always be 50 percent of the final Index calculation.

By splitting the calculation into two, influence from potential selective reporting of data is reduced. This is critical in a tonnage-weighted assessment which calculates the Index in a methodological and mathematical manner.

How does the Index methodology adjust for different levels of concentration between the buyers and sellers?

The sub-indices are based on a tonnage-weighted calculation of actual transactions normalized for grade, payment terms, etc. The final Index is the non-weighted average of the two sub-indices, allowing for equal representation from both sides of the market, and also counters market distortion or selective reporting of data. Only the final Index is published.

The different market concentrations then do not matter, as both sides of the market are treated individually and then combined equally.

Spot pricing vs. long-term contracts

The AMM Scrap Index includes material that will be delivered within 30 days to the mill.

Spot business concluded after the 10th of the month will not be included. Business concluded after the 10th for delivery the following month will be included in that month's calculation. Any material that is delivered as part of a long-term contract is excluded from the calculation process.

Payment terms

The basis of the payment terms is based on typical commercial practice in the Midwest scrap market. Transactions that are conducted on different payment or credit terms will be normalized back to the base specifications, taking into account discounts, current interest rates and standard commercial terms.

Low liquidity

There may be periods when the number of transactions available for inclusion in the Index calculation will fall, for example, due to poor market conditions. AMM has established formal methodologies to address this issue. Where insufficient transactions have taken place in the market, defined as less than 20 percent of the average monthly market volumes over the past 12 months, AMM reserves the right to include assessments, bids and offers from market participants in the Index calculation. These are treated in the same way as transactions, but weighted at a minimum tonnage, and subject to exclusion under the same rules.

What happens if the material is downgraded on delivery?

The transaction is done on the expected delivery specifications, including grade and payment terms, and the price settled on this basis. If it turns out to be different, then that is an issue between the two parties who entered the contract, and the Index is not revised retroactively.