

## Application Brief

## Scrap Shaker Hopper

**Application:** Scrap Weighing prior to furnace

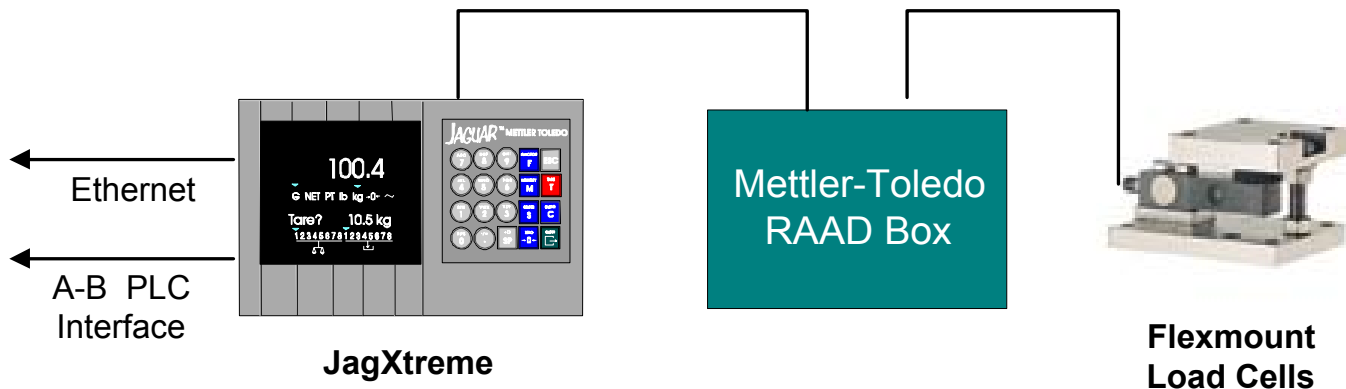
**Customer Requirement:**

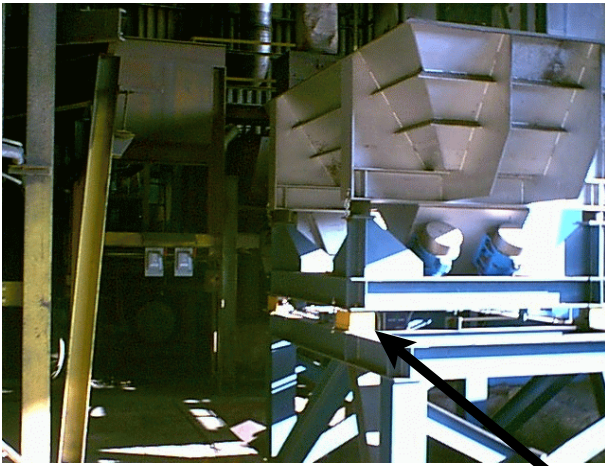
Accurately weigh scrap steel that is loaded into a shaker hopper by overhead crane. Heavy vibration and shock loading would be experienced by the scale system. This system is EXTREMELY CRITICAL to the operation of the entire plant, since it weighs the scrap prior to it being loaded into the furnace. Quick diagnostic capability in the event a scale problem was required.

**SSC Solution - Hardware:**

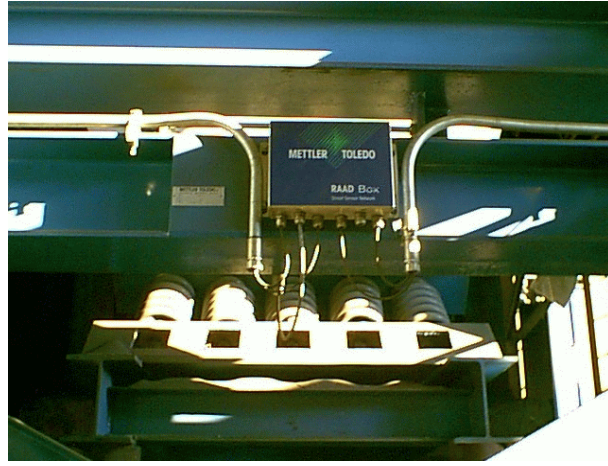
The existing shaker hopper was outfitted with Mettler-Toledo Flexmount Load Cells with Fabreeka pads for vibration rejection.. Their rugged design would withstand heavy vibration and shock loading by the crane. A Mettler-Toledo JagXtreme Terminal was added to provide superior vibration rejection for a stable reading. Finally a Mettler-Toledo RAAD Box (Smart Sensor Network) was provided to allow the maintenance department to monitor each load cell, and immediately alert the operator in case of a problem. Future MT Connection software will allow weight data to be sent directly to Excel Spreadsheets or other Windows based programs.

**Configuration:**





**Shaker Hopper**



**RAAD Box**

**Flexmount Load Cells in Each Corner of the Frame**

**Features**

Flexmount Load Cells w/ Fabreeka Pads

Ethernet and Allen Bradley RIO

RAAD Box

**Customer Benefit**

Provides accurate, repeatable results under shock loading

Connectivity to Maintenance Department

Allows Maintenance Department to "Monitor" each load cell, and be alerted by email or alarm in case of a component failure

**Industry:** Steel / Castings

**Products:** Mettler-Toledo JagXtreme, RAAD Box, Flexmounts

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