INGOT STRAPPING MACHINE WITH ROBOTIC STACKING SYSTEM
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Features

- Fully integrated Robotic Ingot Stacking and Strapping Workcell with Fanuc Robot and Fromm MH600 Strapping Head
- Automatic strapper with bayonet, lifting device, and integrated weigh-scale
- MH600 strapping head feed and take up functions controlled with variable frequency drive and analog tension control
- Fanuc Model M-410iB/450 Robot with Samuel-designed and built end-of-arm tooling to stack hot ingots at high speed
- Machine can be equipped with MH600 head friction seal and VK-30M head for heat seal joints for polyester strap. Machine can also be equipped with VS series heads for steel strapping
- Comprehensive safety system for robotic cell and strapping system
- Temperatures at stacking cell of greater than 180 degrees C (355 degrees F)
- CD12SJ dispensers for 300lbs polyester coils

The Ingot Strapping Machine with Robot Stacker from Samuel Strapping Systems is a custom solution developed specifically for the smelting industry. We combine the best in strapping and robotics technology to provide a fast, efficient, and reliable solution that will drastically reduce your production time and improve your throughput. This no-touch system requires no operator, which frees up manpower for other vital tasks on the factory floor.
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Standard Equipment

**Fanuc Model M-410iB/450 Robot**
- Fastest cycle times and highest payload rating of any robot in its class
- repeatability of ±0.5mm at full speed and full payload
- Custom grip for securely handling multiple ingots
- Vertical articulation eliminates “elbow” interference
- Direct-coupled drives result in higher reliability and reduced maintenance costs
- Sturdy construction allows it to operate in harsh factory floor environments
- Proven, reliable FANUC servo drives provide highest uptime and productivity
- Fast boot time at less than 30 seconds

**MH600 Strapping Head**
- Compact and modular design
- High strap tension up to 1570 lbs adjustable
- Wide strap width range without changing parts
- Reliable friction-weld joint

**CD12SJ Dispenser**
- Large capacity tower
- Quick take-up response
- Linear bearing carriage travel
- Self-contained controls for independent operation or system integration
- “Out of strap” switch

Optional Equipment

**VS12 Steel Strapping Head**
- High-performance electric steel strapping head
- Fully automated strapping heads
- Available in sealless and spot weld joint configurations
- Tungsten Inert Gas (TIG) spot welder provides 90% joint efficiency
- Feed and take-up rate up to 8.2 fps (2.0mps)

**VK30 Plastic Strapping Head**
- Heavy Duty Performance
- High Tension Capability
- Heavy Duty Heater Delivers up to 90% joint efficiency
- PLC-Controlled
- Direct Drive System
- Powered Track Assembly

Specifications

**Operation**
- Robot arm automatically gathers and stacks ingots into multiple layers. Conveyor system brings stacked load to strapping component where load is unitized for transport and storage

**Strapping Size**
- Plastic Strapping: 1/2” – 3/4” width and 0.016” – 0.060” thickness
- Steel Strapping: 1/2”, 5/8” and 3/4” width and 0.017” – 0.031” thickness

**Strap Joint**
- Up to 85% of strap strength (PET)
- Up to 90% of strap strength (Steel)