MODEL 496 NFPA® GRAVIMETRIC COAL FEEDER

ANCILLARY EQUIPMENT

BUNKER OUTLET VALVES

- Pressurized construction
- Stainless steel construction standard
- Double rack and pinion over gate drive (self cleaning)
- Electrically actuated, chain wheel or handwheel operation
- Gate position indicators
- Gate removable without removing valve

KNIFE GATE VALVES

- Designed for burner line applications (pneumatic actuator)
- Can be used for feeder discharge valve (electrically actuated, pneumatically actuated, chain wheel or hand wheel operation)
- Dust-tight construction
- Gate position indicators

FEEDER DISCHARGE HOPPERS

- Reinforced construction, designed to NFPA 85
- Stainless steel construction standard
- Special, polished interior finish available

COAL-IN-PIPE FLOW MONITORS

- Acoustic

DOWNSPOUTS

- Stainless steel construction standard
- Special, polished interior finish available

FEEDER OPTIONS

- Stainless steel enclosure
- Stand alone or feeder mounted control cabinet
- Slot infeed

BELT WIDTH	CAPACITY - see note 3 -	INLET SIZE INSIDE DIA. - see note 1,2 -	INFEED TO DISCHARGE CENTERLINE DIM. - see note 1 -	APPROX. FEEDER WEIGHT
24" (609mm)	45,500kg/hr	18" (457mm)	7' 0" (2,134mm)	3,176kg
36" (914mm)	91,000kg/hr	24" (610mm)	7' 0" (2,134mm)	3,403kg
48" (1,219mm)	136,000kg/hr)	36" (914mm)	8' 0" (2,438mm)	4,083kg

* 1. Dimensions shown are standard. MERRICK also has manufactured many special NFPA feeders to specific dimensional requirements.
2. MERRICK also specializes in Slot Inlet Model 496 Feeders. History and experience has shown that difficult flowing coals can be best handled by use of a tapered slot infeed.
3. Feedrates shown are maximum for given feeder size and are based on coal at 50 lb/cu. ft . (801 kg/cu. m.). Feeder size should also be selected based on material size being fed. Consult MERRICK for more information.

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DYNAMIC INNOVATIONS SINCE 1908

WEIGHING, FEEDING, CONTROLS & ENVIRONMENTAL SOLUTIONS

MODEL 496

NFPA® GRAVIMETRIC COAL FEEDER

A TIME-TESTED DESIGN AND DISTINCTIVE FEATURES MAKE THE MODEL 496 THE CHOICE FOR THE FUTURE

MERRICK

Exclusive Agent of Korea
DAEDO Co.,Ltd

MODEL 496 NFPA® GRAVIMETRIC COAL FEEDER

STANDARD FEATURES

DAEDO

MERRICK

ENCLOSURE

1. PRESSURIZED SHELL DESIGN
Exceeds NFPA 85 design criteria. Every critical area is reinforced with ribs and gussets. No castings are used on any pressure boundary or in any pressure retaining component.

2. TOTALLY ENCLOSED FEEDER DRIVE
A non-ventilated, vertically mounted AC motor with a high efficiency off -the-shelf gear reducer is directly mounted to the drive shaft .

3. EXCLUSIVE QUICK-ACCESS END DOORS
Located at either end of the feeder, each heavy-duty door is supported by a single hung davit that allows it to be completely swung away from the opening in a minimum amount of space. Swing away toggle clamps provide fast positive sealing of each door.

4. DURABLE CONSTRUCTION
For maximum life and reduced maintenance, any surface that comes into contact with coal is constructed of stainless steel or rubber.

5. REMOVABLE ACCESS PANELS
Oversized panels are located at the head and tail pulleys and at the weigh suspension, providing easy access for maintenance and inspection.

6. OBSERVATION PORTS AND LIGHTING
Strategically located observation ports provide excellent unobstructed views of the inside of the feeder.

7. BELT SPEED ENCODER
Located on the tail pulley to accurately measure true belt travel.

WEIGHING

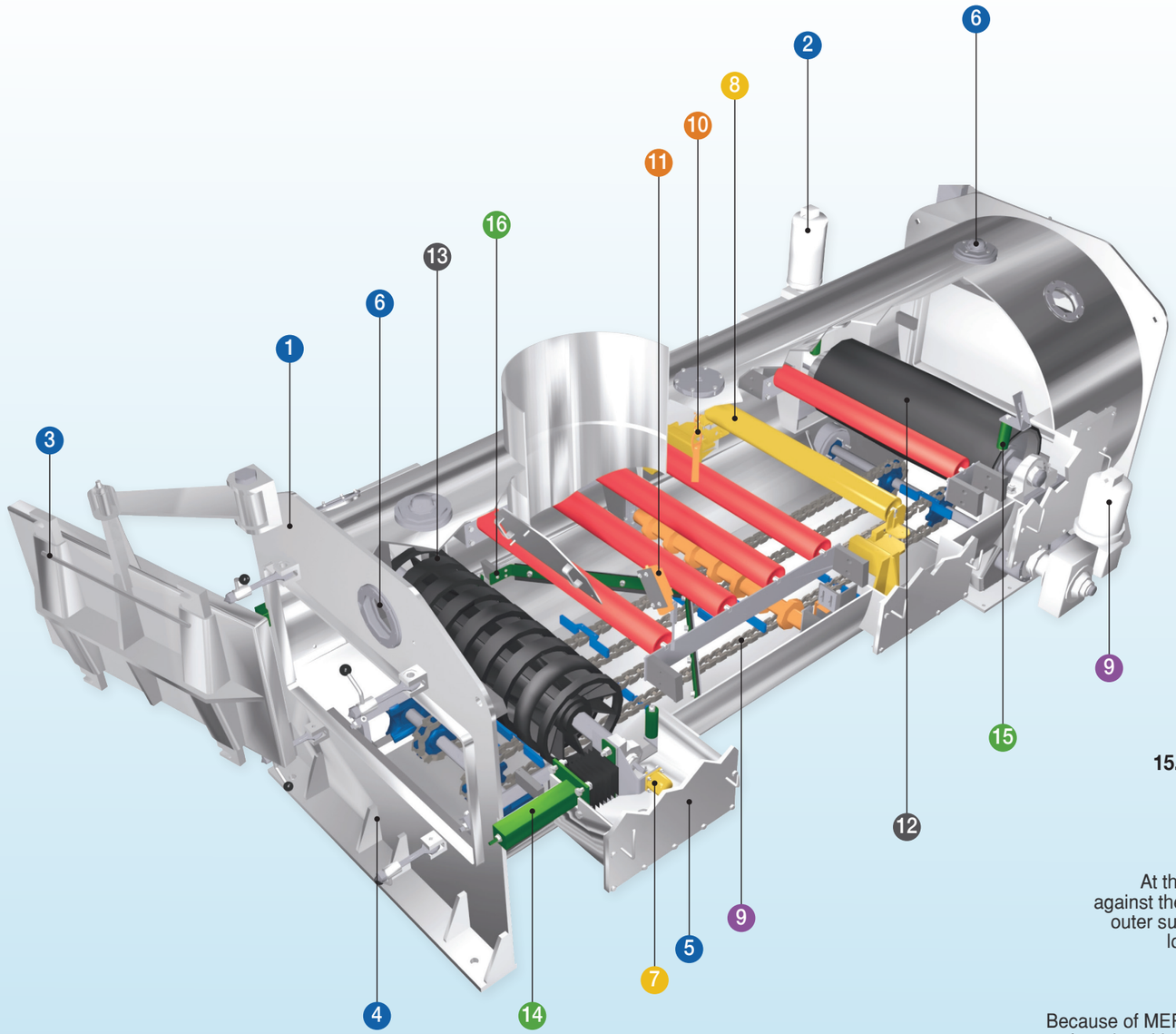
MOTOR SPEED ENCODER
Allows for comparing motor speed to belt speed for slippage or breakage detection (not shown).

8. STAINLESS STEEL WEIGH SUSPENSION
The MERRICK Coalometer utilizes dual hermetically sealed, stainless steel load cells. The weigh suspension is designed for easy removal and maintenance and is constructed entirely of stainless steel.

CLEANOUT

9. CLEAN-OUT CONVEYOR
A drag chain-type conveyor thoroughly sweeps the stainless steel floor of the feeder into the discharge chute to minimize coal and dust build-up. The conveyor is driven by an AC motor with an integral high efficiency off -the-shelf gear reducer.

INDEPENDENT DRAG CHAIN CONTROL
The integral clean-out conveyor (drag chain) can be controlled in one of two different modes: continuous or timed (not shown).



ALARM SENSORS

DISCHARGE PLUGGAGE SWITCH
Indicates coal pluggage in the discharge chute (not shown).

10. COAL-ON-BELT SWITCH
Identifies the presence or absence of material on the feeder belt.

11. BELT TRACKING SWITCHES
Located on either side of the belt, these two-stage switches can first indicate an alarm and then can take additional action as programmed.

PULLEYS

12. LAGGED HEAD PULLEY
Rubber coated head pulley is lagged and crowned to assure positive belt drive and tracking.

13. SELF-CLEANING TAIL PULLEY
A spiral wound crowned tail pulley helps keep the inside of the feeder belt clean and helps maintain positive belt tracking.

BELT

14. BELT TAKE-UPS
Constructed of stainless steel, take-ups are totally enclosed and adjustable from outside the feeder.

15. BELT GUIDE ROLLERS (OPTIONAL)
Located on either side of the head and tail pulleys, aiding proper belt tracking.

16. BELT SCRAPERS
At the head pulley a scraper is held positively against the belt by counterweights and scrapes the outer surface of the belt. A v-type plow scraper is located on the inside bottom belt strand to minimize coal build-up on the pulleys.

CURBED FLAT BELT
Because of MERRICK's unique inlet design, the need for accuracy harming skirtboards, high belt curbing, or beltt racking v-guides is eliminated, allowing a more accurate flat belt with a minimum one-inch curb (not shown).

COAL VALVES

- Bunker Outlet Valves are designed to cut through a standing column of material
- Knife Gate Valves provide "off -on" control of material of varying sizes

GENETIX PROCESS CONTROLLER

Genetix® has the flexibility to accommodate both simple and complex system configurations. With Genetix® you can choose where to add intelligence to your process and the best method to seamlessly integrate the information into your plant control system. You can adapt Genetix® to your system and application needs.