CUSTOM SOLUTIONS FURNACE & BOILER CLEANING

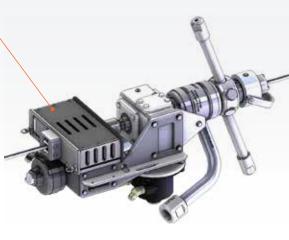
CABLE SWIVEL TOOL (CST)

The patented CST-AIR has a unique hollow-shaft design allowing it to slide on a 3/8 in. (9.5 mm) diameter stretched cable (not supplied) for cleaning hard to access equipment like furnaces and boilers. The CST uses a separate pulling cable or an Autobox ABX-PRO for propulsion, and head rotation is powered by an air motor.

- **Extension nipples adapt the tool to various vessel sizes** and improve jet quality by reducing stand-off distance
- **⊘** Ideal for cleaning Direct Fired Furnaces, Superheaters, **Economizers, Boilers, Reformers, Cokers and Precipitators**

CST-PRO

Use an AutoBox ABX-PRO tractor to drive the CST and eliminate the need for a pulling cable. The ABX-PRO delivers consistent and remotely adustable forward and reverse speed for effective cleaning.





FLEXIBLE 6-PORT HEAD

Configured with 2 ports @ 90°, 2 ports @ 80°, 1 port @ 70° and 1 port @ 110°. Simply select the ports needed for the job and plug the others. Extension nipples further adapt the tool to various vessel sizes and improve jet quality by reducing stand-off distance.

| TOOL MODEL | PRESSURE RANGE | FLOW RANGE | INLET CONNECTION | ROTATION SPEED | ROTATION RANGE | WEIGHT |
|------------|-------------------------|---------------------------|---------------------|----------------|----------------|---------------|
| CST-AIR | Up to 10k psi (700 bar) | Up to 170 gpm (640 I/min) | 2 x 1" NPT | 5-60 rpm | 360° | 46 lb (21 kg) |



BIG FLOW WATERLANCER (BFW-100)

The BFW-100 is an automated system designed for hands-free online boiler cleaning that enables contractors to reduce down time by cleaning at high temperatures. With a 300 gpm (1140 l/min) flow capability, the BFW-100 can effectively clean any large vessel with limited entry access.

The BFW-100 features an adjustable cart with an air-powered boom positioner and provides excellent cleaning for pulp plant boilers, refinery and chemical plant vessels, as well as furnace radiant sections.

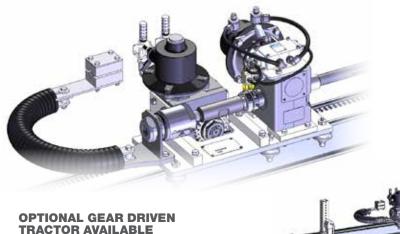
- **⊘** Temperature resistant design reduces downtime by allowing cleaning operation while online
- Remote Control Box controls linear and rotation speeds from a safe distance
- Adjustable rail and cart allows for easy tool positioning, including elevation and angle of the lance
- Cantilever option available for lengths up to 24 ft (7.3 m)

IDEAL FOR: Pulp plant boilers

- Refinery and chemical plant vessels
- Furnace radiant sections
- Boiler floors



| TOOL MODEL | PRESSURE RANGE | FLOW RANGE | INLET CONNECTION | ROTATION SPEED | LINEAR SPEED | STROKE LENGTH |
|------------|-------------------|----------------------|------------------|----------------|----------------------------|---------------------|
| BFW-100 | 10k psi (700 bar) | 300 gpm (1140 l/min) | 1" NPT | 10-50 rpm | 8-35 ft/min (2.4-11 m/min) | Up to 24 ft (7.3 m) |



CAN BE MOUNTED ON EXISTING STANDS IF MOBILE CART IS NOT REQUIRED



