

High-Performance Welded Tubes – Bright Annealed Finish (BA)]

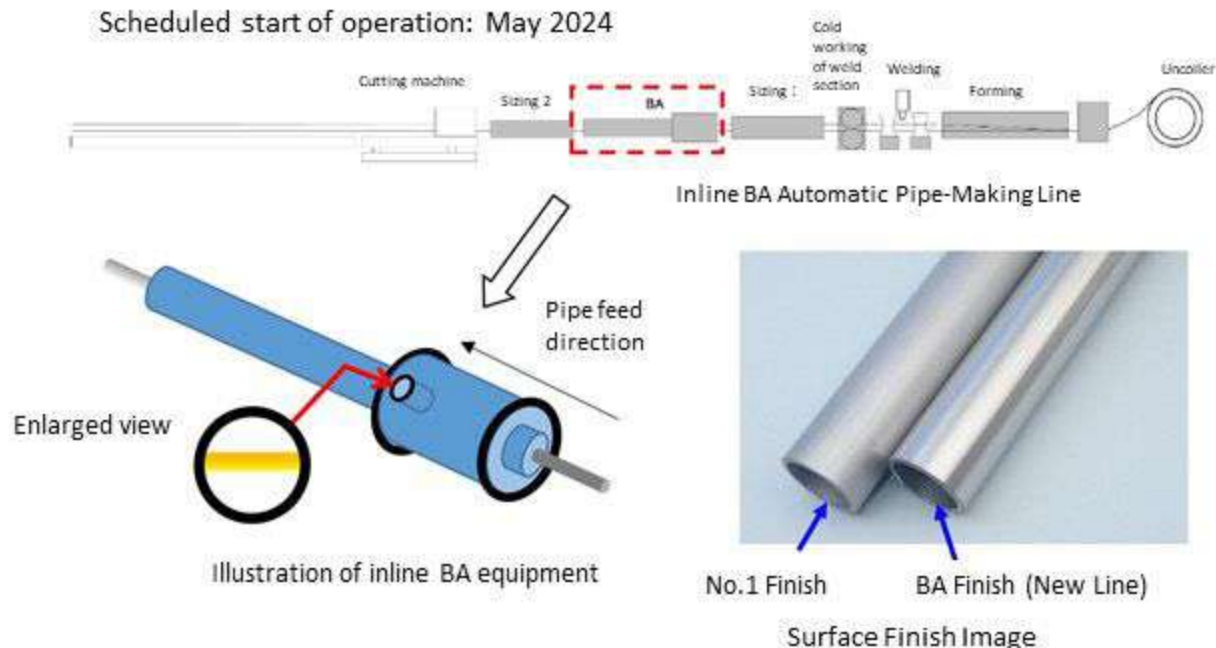
NAS TOA Co., Ltd., a group company of Nippon Yakin Kogyo Co., Ltd. (engaged in the manufacture and sale of stainless steel welded pipes and high-performance alloy welded pipes), has introduced an inline BA automatic pipe-making line at its Chigasaki Plant (Hagisono, Chigasaki City, Kanagawa Prefecture) to strengthen sales of high-performance alloy welded pipes.

(*) BA: Abbreviation for Bright Annealing

1. Overview of the Inline BA Automatic Pipe-Making Line

A continuous automatic pipe-making machine equipped with a bright annealing furnace (BA furnace) capable of heat treatment in a hydrogen gas atmosphere and a cold working device for the welded section.

Scheduled start of operation: May 2024



2. Product Features

- **High-quality welded pipes:** By conducting heat treatment in a hydrogen gas atmosphere, the pipe surface is protected from oxidation. Compared to atmospheric heat treatment or pickled products, the surface has a glossy finish, lower surface roughness, and equal or superior corrosion resistance, resulting in a high-quality finish.
- **Shorter lead times:** Since heat treatment is performed within the automatic pipe-making line and pickling of high-performance materials—which are difficult to pickle—is omitted, manufacturing lead time is reduced.
- **CO₂ emission reduction:** These products are manufactured using a process that emits less CO₂ compared to conventional methods.

3. Main Applications of the Product (Welded Pipes)

Multi-tube heat exchanger tubes for various industries (shell and tube type heat exchangers), etc.

4. Manufacturing Capabilities

Thickness mm Outer Diameter mm	0.5	1.0	1.2	1.5	2.0	2.5	3.0	3.3
12.00	○	○						
19.05		○	○	○	○	○	○	○
25.40		○	○	○	○	○	○	○
34.00		○	○	○	○	○	○	○
38.10		○	○	○	○	○	○	○



Capable of Producing
BA-Finished Products



Capable of Cold Working Welded Sections
(Bead Rolling)

Supported Size Range: Outer diameter Φ12–38.1 mm, wall thickness 0.5–3.3 mm, maximum length 14.5 m

※ Other dimensions are also available upon request.

Applicable Materials:

- High Corrosion-Resistant Alloys : N10276, N06022, N06625, N08825, N04400, N08020 Others
- Pure Nickel : N 02201
- Heat-Resistant Alloys : N08800, N08810, N08811, N06600, N06601 Others
- Duplex Stainless Steel : S32506(NAS64/SUS329J4L), S32750(NAS74N/SUS327L1), S31803/S32205(SUS329J3L) Others
- Super Austenitic Stainless Steel : S32053(NAS254N/SUS836L), N08367(NAS254NM), S31254(NAS/SUS312L), N08904(NAS255/SUS890L), N08926(NAS255NM) Others