

# THE BÖHLETIN

## BOHLER A610 – Superior Corrosion Resistance

**BOHLER A610** / 1.4361 / UNS S30600, originally invented and patented by BÖHLER Edelstahl GmbH & Co KG, is a fully austenitic stainless steel for nitric acid storage and production. This silicon alloyed stainless steel has proven over decades its excellent performance and resistance against corrosion in such demanding applications. In regards to material selection, there is no better or longer lasting option than **BOHLER A610** steel for respective applications.

The chemical composition is responsible for the material's general resistance against uniform corrosion, but the manufacturing experience, state of the art production equipment and precisely executed manufacturing processes, from melting to rolling, heat treatment and finishing, award **BOHLER A610** its superior resistance against intergranular corrosion.

Company standards are usually more stringent than material standards of national standards organizations like ASTM, EN, ISO etc. and usually applied by equipment manufacturers in order to guarantee a certain lifetime

and reliability of their product. Recent corrosion testing at an independent laboratory showed clearly the superior performance of **BOHLER A610** material against the generic material of two European competitors.

The results are proof that if highest quality, reliability and performance are required, there is no other option than special steel from BÖHLER. **BOHLER A610** is available in tailor made dimensions according our clients' individual requirements.

The complete package is rounded off with the BÖHLER EASN 2 Si-IG filler metal, which is perfectly matched to the **BOHLER A610**. The combination of **BOHLER A610** sheets and plates and the specially developed filler material offers the best possible resistance to intergranular corrosion and thus guarantees the maximum service life for use in nitric acid.

**BÖHLER special steel for the world's top performers.**

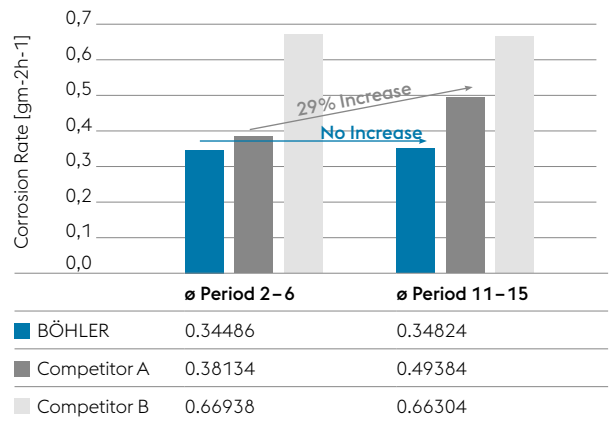


## BOHLER A610 – SUPERIOR CORROSION RESISTANCE

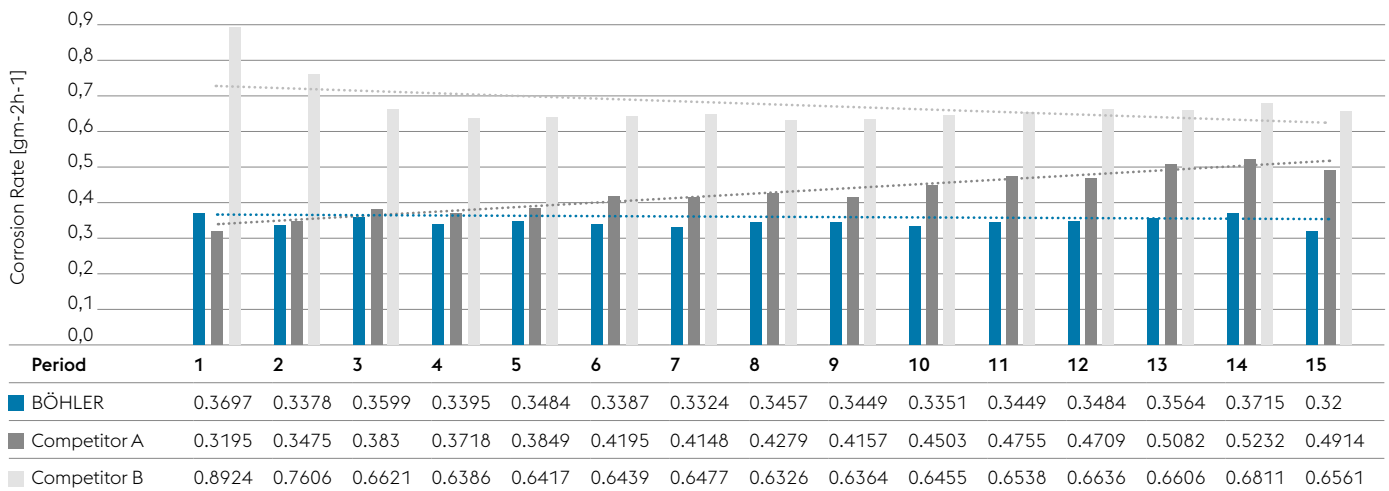
The respective company standards acceptance criteria are:

- » DIN EN ISO 3651-1
- » C-content of max 0,012 wt%
- » Max mass loss of 0,8 gm<sup>2</sup>h<sup>-1</sup>
- » Max localized corrosion attack depth of 0,03 mm
- » Max increase of 15% of the corrosion rate between periods 11–15 compared to periods 2–6

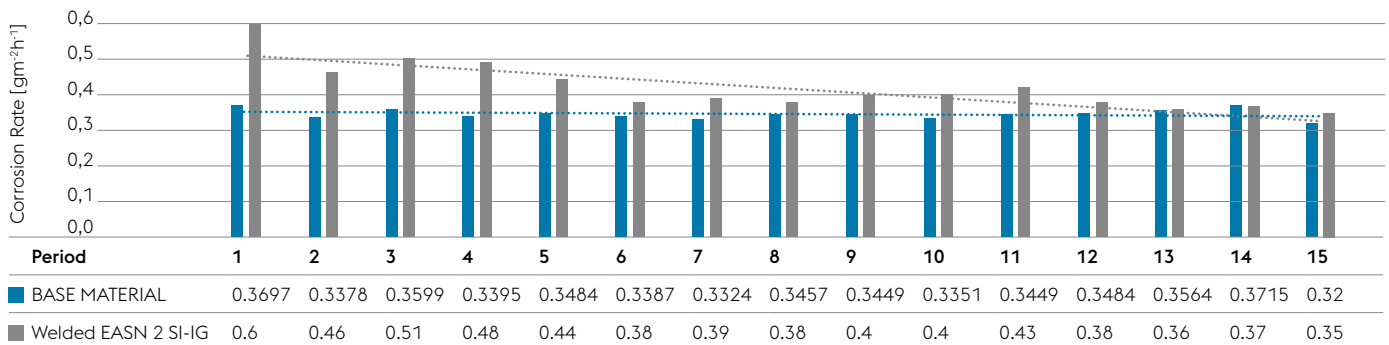
### Huey Standard



### Corrosion Rate for material BÖHLER A610



### BÖHLER EASN 2 Si-IG filler metal



### Chemical Composition

	C	Si	Mn	P	S	Cu	Cr	Ni	Mo
ASTM/ASME A/SA240	0.018	3.7–4.3	2.00	0.020	0.020	0.50	17.00–18.50	14.0–15,5	0.20
DIN EN 10088-2	0.015	3.7–4.5	2.00	0.025	0.010	--	16.50–18.50	14.0–16.0	0.20
BÖHLER	0.004	3.94	0.71	0.02	0.00	0.04	17.47	14.74	0.07
Competitor A	0.006	3.76	1.61	0.02	0.00	0.04	16.94	14.50	0.12
Competitor B	0.016	3.54	0.68	0.01	0.00	0.11	17.41	14.84	0.05

