

Rapporto di prova	CRYOGENIC TEST			Messrs BREMER Via Rivera 36 20048 CARATE BRIANZA MI
Unità Emittente	Nr. Rapporto di Prova	Pag.	di	
SND	0946/2086/91	01	02	

Component : N° 1 Ball valve DN 80; SNA P/X FI
Material : AISI 316
Examined area : Tightness of seat
Reference procedure : APPENDIX A of BS 6364 (1984)
Maximum allowable seat leakage : 480 ml/min.

TEST EQUIPMENTS

Leak detector : Leybold Ultratest M2DS Serial No. : 118542.0060
Sensitivity : 1×10^{-10} mbar.l/s
Flowmeter : MKS Flow Controller Serial No. : 48352G
Measuring range : 0 ÷ 1000 ml/min.
Calibrated leak : - Permeation type TL 7 Serial No. : 1337130100 904301-WP2
Nominal value : 3×10^{-7} mbar.l/s
- Pressure gage : Dial type 10 bar F.S. Serial No : L 13355
- Valve and fittings : SWAGELOK type

TEST CONDITIONS

- Inside temperature of the valve body : -194°C
- Temperature of valve bonnet : -163°C
- Test pressure : see page 02
- Waiting time for temperature stabilization : 60 min.
- Ambient temperature : 25°C

DATA	FIRME UNITÀ EMITTENTE		FIRME D'APPROVAZIONE INTERNE	
	PREPARATO DA	VERIFICATO DA	D. T.	
18.09.91	MAGNI	V. MORANDI	D. POZZI	

Unità Emittente		Pag.	di
SND	0946/2086/91	02	02

TEST RESULTS

1) Opening and closure operations at -194°C :

- a) first opening force : 34 Kg
- b) first closure force : 34 Kg
- c) last opening force : 34 Kg
- d) last closure force : 34 Kg

Lever lenght : 500 mm.

2) Seat test at -194°C :

Seat pressure (bar)	Leakage rate measured (ml/min.)
2	17
3	20
4	26
5	30
6	34
8	46
10	46
12	47
14	48
16	52

3) Leakage of the valve gland with valve at -194°C. : 1.4×10^{-4} mbar.l/s

