

January 28, 2005

Mr. Guido Schulz
Herose Gmbh Armaturen Und Metalle
Elly-Heuss-Knapp-Strabe 12
D-23843 Bad Oldesloe,
GERMANY

**SUBJECT: Capacity Certification, Valve Type: 06388, 06418/1006
(NB Cap Cert. No. HER-M91088)**

Dear Mr. Schulz:

We have reviewed test results referenced below, which demonstrate successful completion of testing for capacity certification of the subject valve as required by paragraph UG-136(c)(3) of Section VIII of the ASME Code.

Herose Gmbh Armaturen Und Metalle is hereby granted capacity certification and authorization to apply the "NB" mark to the valve type listed in the scope of certification. This authorization is valid for the above location and only while the organization holds a current ASME "UV" Certificate of Authorization and is fully implementing its quality system as accepted by the National Board.

SCOPE OF CERTIFICATION

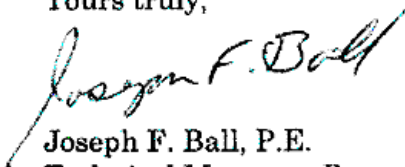
VALVE TYPE: 06388, 06418/1006

Organization Type: Manufacturer

**Certified Rating Value/Sizes/Pressure Ranges:
As Listed in NB-18**

Certification Expiration Date: December 9, 2009

Yours truly,


Joseph F. Ball, P.E.
Technical Manager, Pressure Relief Dept.

FILE: LE: 050127HERM91088.DOC

REF. TEST NOS. LESER: H075A21, H007A11, H075A12, H075A13

**THE
NATIONAL
BOARD**

**OF BOILER AND
PRESSURE VESSEL
INSPECTORS**

**DONALD E. TANNER,
EXECUTIVE DIRECTOR**



1055 CRUPPER AVE.

COLUMBUS, OHIO

43229-1183

U.S.A.

614.888.8320

EXECUTIVE
Fax 614.888.0750

TECHNICAL
Fax 614.847.1828

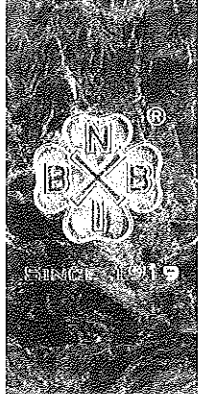
PRESSURE RELIEF DEPT.
Fax 614.848.3474

ORDER DEPARTMENT
Fax 614.847.1147

TRAINING DEPARTMENT
Fax 614.847.5542

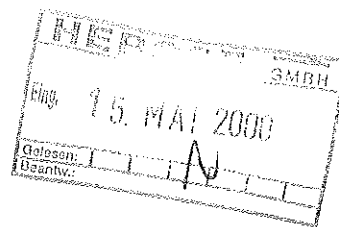
EMAIL
getinfo@nationalboard.org

WEB SITE
nationalboard.org



April 20, 2000

Herose Gmbh Armaturen und Metalle
Mr. Guido Schulz
Elly-Heuss-Knapp Strasse 12
D-23843 Bad Oldesloe, Germany



**THE
NATIONAL
BOARD**

**OF BOILER AND
PRESSURE VESSEL
INSPECTORS**

**ALBERT J. JUSTIN,
EXECUTIVE DIRECTOR**

**SUBJECT: Capacity Certification Valve Type 06418, 06388/1004, 1006,
Section VIII Air and Gas Service (NB CAP CERT ID NO. HEG-
M91008)**

Dear Mr. Schulz:

We have reviewed the results of tests numbers 99215031 and 99215081 conducted on December 9, 1999 at the Leser Gmbh National Board/ASME accepted Testing Laboratory for the purpose of obtaining production capacity certification of the subject valve type.

These results each valve opened within the applicable tolerance for set pressure. Blowdown is considered fixed for this valve type. When flow tested both valves met their rated capacities.

Herose Gmbh Armaturen und Metalle has successfully completed testing in accordance with the provisions of paragraph UG-136(c)(3) of Section VIII of the ASME Code. You are hereby granted capacity certification and authorization as the manufacturer of valve type **06418, 06388/1004, 1006**, (NB Cap Cert No **HEG-M91008**) to apply the "NB" mark to this valve type. This authorization will expire on December 9, 2004, and is valid only while you hold a current ASME "UV" Certificate of Authorization and while your organization continues to comply with the Code requirements and is fully implementing your quality system as accepted by the National Board.

1055 GRIPPER AVE.
COLUMBUS, OHIO
43229-1183
U.S.A.
(614) 888-8320

EXECUTIVE
Fax (614) 888-0750

TECHNICAL
Fax (614) 847-1828

PRESSURE RELIEF DEPT.
Fax (614) 848-3474

ORDER DEPARTMENT
Fax (614) 847-1147

TRAINING DEPARTMENT
Fax (614) 847-5542

E-MAIL
getinfo@nationalboard.org

WEB SITE
www.nationalboard.org

Please complete the attached capacity certification sheet for our records.

Yours truly,

Joseph F. Ball, P. E.
Technical Manager, Pressure Relief Department

REF: HEG-M91008 prod.wpd

en. 25.07.00

Board of Trustees

D.E. Tanner
Chairman
State of Tennessee

H.T. McEwen
First Vice Chairman
State of Mississippi

D.A. Douin
Second Vice Chairman
State of Illinois

T.F. Wickham
Member at Large
State of Rhode Island

N. Surtees
Member at Large
Province of
Saskatchewan

J. Corcoran
Member at Large
State of Connecticut

R.A. Coomes
Past Chairman
Commonwealth
of Kentucky

The National Board of Boiler and Pressure Vessel Inspectors

1055 Crupper Ave., Columbus, Ohio 43229

PRESSURE RELIEF DEVICE RELIEVING CAPACITY CERTIFICATION

Name of manufacturer: HEROSE GNBH Plant location: 23843 Bad Oldesloe/Germany

Device series or type: 06388, 06418 / 1004, 1006

Capacity tests conducted
In accordance with section VIII of the ASME Code with 3 % O.P. at Leser GmbH/Hamburg on 9.12.1999
(location) (date)

Method of establishing relieving capacity (coefficient, slope, or other): Average slope Test medium: Air

	Set Pressure (psig)	Minimum Blowdown (lbs. or fixed)	Certified Lift (inches) Minimum	Capacity (lbs. per hour) (steam)	Capacity (SCFM) (air)
Inlet size <u>1/2"</u> in.	<u>215,0</u>	<u>fixed</u>	<u>0,0866</u>		<u>483,6</u>
Outlet size <u>1"</u> in.					
Orifice dia. <u>0,414</u> in.					
— or —					
Seat dia. <u>0,512</u> in.					
Flow area <u>0,139</u> in. ²					

	Set Pressure (psig)	Minimum Blowdown (lbs. or fixed)	Certified Lift (inches) Minimum	Capacity (lbs. per hour) (steam)	Capacity (SCFM) (air)
Inlet size <u>3/4"</u> in.	<u>102,0</u>	<u>fixed</u>	<u>0,0866</u>		<u>245,7</u>
Outlet size <u>1"</u> in.					
Orifice dia. <u>0,417</u> in.					
— or —					
Seat dia. <u>0,512</u> in.					
Flow area <u>0,139</u> in. ²					

	Set Pressure (psig)	Minimum Blowdown (lbs. or fixed)	Certified Lift (inches) Minimum	Capacity (lbs. per hour) (steam)	Capacity (SCFM) (air)
Inlet size in.					
Outlet size in.					
Orifice dia. in.					
— or —					
Seat dia. in.					
Flow area in. ²					

The mediums for which the device type is certified:
1. Gases 2. _____ 3. _____

The National Board hereby accepts the capacities of pressure relief devices shown above as having been determined in accordance with the applicable rules formulated by the ASME Boiler and Pressure Vessel Committee.

Date _____ (Executive Director or Director, Safety Valve Department)

The National Board of Boiler and Pressure Vessel Inspectors
1055 Crupper Avenue
Columbus, Ohio 43229

Gentlemen:

We certify that the information shown opposite the set pressures on the reverse of this form has been determined in accordance with the applicable rules formulated by the ASME Boiler and Pressure Vessel Committee. We acknowledge that the set pressure range as stated constitutes the limits of set pressures to be considered for capacity certification and use of the Code symbol stamp and "NB" mark.

Company: HEROSE GMBH

By: Guido Schulte

Title: Ass. of President

HEROSE GMBH
ARMATUREN UND METALLE
Eily-Heuss-Knapp-Straße 12

ASME Certificate of Authorization no. 31,820 for

use of the UV Code symbol stamp

Expiration date April 26, 2003



**THE
NATIONAL
BOARD**

**OF BOILER AND
PRESSURE VESSEL
INSPECTORS**

**ALBERT J. JUSTIN,
EXECUTIVE DIRECTOR**

1055 GRUBBER AVE.
COLUMBUS, OHIO
43229-1183
U.S.A.
(614) 888-8320

EXECUTIVE
Fax (614) 888-0750

TECHNICAL
Fax (614) 847-1828

PRESSURE RELIEF DEPT.
Fax (614) 848-3474

ORDER DEPARTMENT
Fax (614) 847-1147

TRAINING DEPARTMENT
Fax (614) 847-5542

E-MAIL
getinfo@nationalboard.org

WEB SITE
www.nationalboard.org

Board of Trustees

D.E. Tanner
Chairman
State of Tennessee

H.T. McEwen
First Vice Chairman
State of Mississippi

D.A. Douin
Second Vice Chairman
State of Illinois

T.F. Wickham
Member at Large
State of Rhode Island

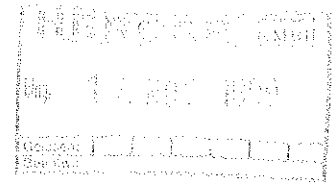
N. Surtees
Member at Large
Province of
Saskatchewan

J. Corcoran
Member at Large
State of Connecticut

R.A. Coomes
Past Chairman
Commonwealth
of Kentucky

November 10, 1999

HEROSE GMBH ARMATUREN UND METALLE
Mr Guido Schulz
Elly-Heuss-Knapp-Str.12
D-23843 Bad Oldesloe Germany



SUBJECT: Initial Capacity Certification of Valve Type 06388/1006 (NB Cap Cert No HEG-M91008)

Dear Mr. Schulz:

We have reviewed the results of test numbers 99703-9, 99703-11, 99703-13 and 99703-15 conducted on July 30, 1999, at Leser's National Board/ASME Accepted Testing Laboratory for the purpose of obtaining initial capacity certification of the subject valve type.

The results indicated each valve opened within the applicable tolerance for set pressure. Blowdown is considered fixed for this valve type. When flow tested, an average slope of 1.685 scfm/psia was determined. Each valve had a slope within the required range of $\pm 5\%$ of the average slope.

Herose Gmbh Armaturen Und Metalle is hereby granted initial capacity certification for valve type 06388/1006 with a rated slope of 1.517 scfm/psia valid for set pressures ranging from 50 to 586 psi.

When the valve is placed into production, you are requested to contact this office to make arrangements for a National Board representative to visit your facilities to randomly select two (2) production sample valves which will later be tested at a National Board/ASME accepted testing laboratory.

NOTE: Do not ship any valves bearing the National Board "NB" mark until successful testing has been completed in accordance with the provisions of paragraph UG-136(c)(3) of Section VIII of the ASME Boiler and Pressure Vessel Code.

Since this valve type was changed from one type to three different types, you will need to submit a new application for this valve type.

Yours truly,

Joseph F. Ball, P. E.
Technical Manager, Pressure Relief Department

JFB/kab

Ref: LNovember10-10.JFB