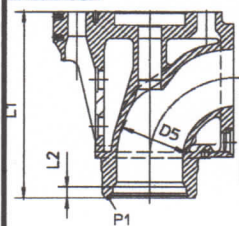


Exhaust Valve Overhaul



Customer: Marathon	Vessel: Orion Voyage	Date: 19.02.2011 & 27.06.2011
Engine Type: RTA 72	WE:	Inspected By: Roslan

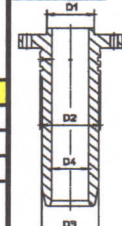
Valve Cage



Component marking:	
IHI RT72 89-26	
Rubi-no.	34164.4
In. diam. for seat ring:	380.09
Abrasive wear:	OK
D5	350

Remarks:
L1=1100
L2=60
P1=OK

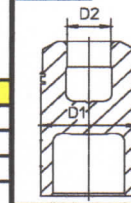
Guide Bush



Component marking:	
41071M17516	
Rubi-No.	-
Inner diameter D4:	75.05
Outer diameter D2:	120.01
Outer diameter D3:	115.03

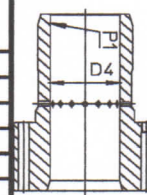
Remarks:
Inner bore D4 found with scuffing and deep scoring marks.
Request for renewal.

Oil Piston



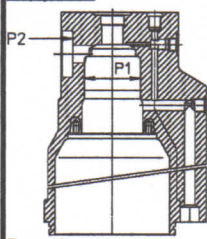
Component marking:	
NOT AVAILABLE	
Rubi-No.	
Outer diameter D1:	
Inner diameter D2:	
Piston ring upper:	
Piston ring lower:	

Bush



Component marking:	
NOT AVAILABLE	
Rubi-No.	
Inner diameter D4:	
Crack detected P1:	

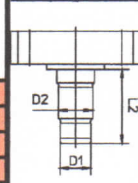
Oil cylinder



Component marking:	
NOT AVAILABLE	
Rubi-no.	
Flatness P2:	
Inner diameter P1:	
Crack detected P1:	

Remarks:

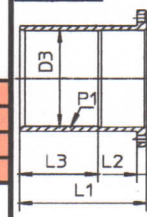
Damping element



Component marking:	
NOT AVAILABLE	
Rubi-No.	
Lenght L2:	
Outer diameter D1:	
Outer diameter D2:	

Remarks:

Air cylinder



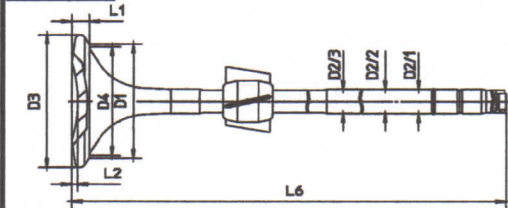
Component marking:	
C9	
Rubi-No.	34163.7
Lenght L1:	295
Inner diameter D3:	270.20
Crack detected D3:	No crack

Remarks:

Inner running surface found worn at lower section.

Request for renewal.

Valve Spindle

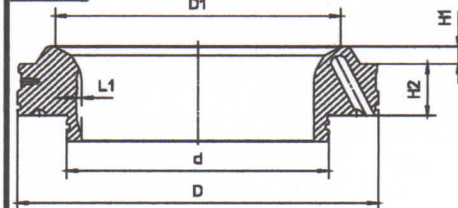


Component marking:		
41172 3 30102		
Rubi-No.	34164.2	RUBI-OUT
Overall lenght L6:	1646	
Hight of valve head L1:	45.20	
Head surface burnt depth L2:	1.10	
Calculation head burnt-depth L3:	1.40	
Stem diameter D2 / 1:	74.76	
Stem diameter D2 / 2:	74.77	
Stem diameter D2 / 3:	74.77	
Seat edge diameter D1:	349.2	
Seat angle:		
Head diameter D3:	405	
Seat inner dia. / Dia. underhead radius D4:	-	
Depth of seat blow- by L4:	None	
Length of seat blow- by L5:	None	

Remarks:

Valve stem coating at D2/2 and D2/3 found with overheating and burnt marks.

Seat Ring



Component marking:		
B115 5-92		
Rubi-No.	25162.5	RUBI-OUT
Outer diameter D:	499.34	
Outer diameter d:	380.16	
Inner diameter D1:	401.25	
Length H1:	24.2	
Length H2:	70	
Seat crack detected:	No Crack	
Seat angle:		
Depth of seat blow-by L2:	None	
Lenght of seat blow-by L3:	None	
Abrasive wear in inner dia. L1:	1.00	

Remarks:

Inner wall (L1) is an insert type.

Exhaust Valve Overhaul



Customer : **MAK**

Vessel: **MAK Mayag**

Date: 19.02.2011

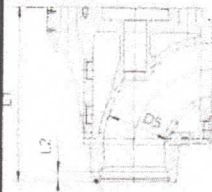
Engine Type: RTA 72

WE: 19829

Inspected By: Roslan

Unit No. 1

Valve Cage



Component marking:

RAST 3415U1706, No.6 T37-3 DU
31-1-92

Rubi-no.	35124.5
In. diam. for seat ring:	380,09
Abrasive wear:	OK
D5	350

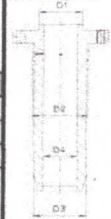
Remarks:

L1=1100

L2=60

P1=OK

Guide Bush



Component marking:

D6

Rubi-No.	35124.6
Inner diameter D4:	75,05
Outer diameter D2:	120,01
Outer diameter D3:	115,03

Remarks:

Inner bore D4 found with scuffing and pitting.

Oil Piston

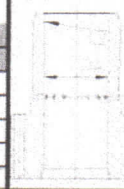


Component marking:

K5

Rubi-No.	35124.7
Outer diameter D1:	119,89
Inner diameter D2:	55,90
Piston ring upper:	OK
Piston ring lower:	OK

Bush

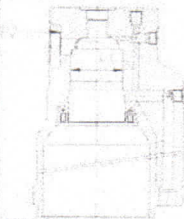


Component marking:

Y3

Rubi-No.	31048,5
Inner diameter D4:	120,02
Crack detected P1:	OK

Oil cylinder



Component marking:

NO. 5 T63

Rubi-no.	35124.9
Flatness P2:	OK
Inner diameter P1:	150,01
Crack detected P1:	OK

Remarks:

Damping element



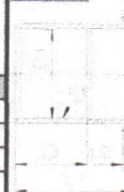
Component marking:

T5

Rubi-No.	35125.0
Length L2:	110
Outer diameter D1:	55,19
Outer diameter D2:	59,46

Remarks:

Air cylinder



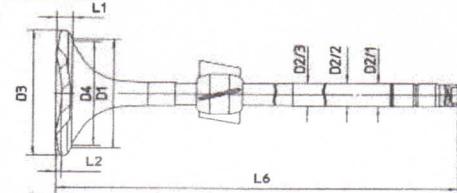
Component marking:

B6

Rubi-No.	35125.1
Length L1:	295
Inner diameter D3:	270,04
Crack detected D3:	OK

Remarks:

Valve Spindle



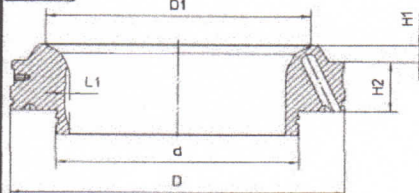
Component marking:

557 B109 10-91 TE-O

	RUBI-IN	RUBI-OUT
Rubi-No.	35125.2	
Overall length L6:	1639	
Height of valve head L1:	39,5	
Head surface burnt depth L2:	8,5	
Calculation head burnt-depth L3:	14,5	
Stem diameter D2 / 1:	74,46	
Stem diameter D2 / 2:	74,80	
Stem diameter D2 / 3:	74,76	
Seat edge diameter D1:	349,9	
Seat angle:		
Head diameter D3:	403	
Seat inner dia. / Dia. underhead radius D4:	350	
Depth of seat blow-by L4:	-	
Length of seat blow-by L5:	-	

Remarks:

Seat Ring



Component marking:

B109 10-91

	RUBI-IN	RUBI-OUT
Rubi-No.	35125.3	
Outer diameter D:	499,5	
Outer diameter d:	380,13	
Inner diameter D1:	397,7	
Length H1:	25	
Length H2:	70	
Seat crack detected:	OK	
Seat angle:		
Depth of seat blow-by L2:	-	
Length of seat blow-by L3:	-	
Abrasive wear in inner dia. L1:	6	

Remarks:

Exhaust Valve Overhaul



Customer : **ROSLAN**

Vessel: **Exhaust Valve**

Date: 19.02.2011

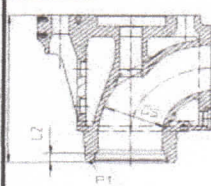
Engine Type: RTA 72

WE: 19830

Inspected By: Roslan

Unit No. 2

Valve Cage



Component marking:

RAST 3415U1703, No.3 T36-3 DU
31-1-92

Rubi-no.	35125.4
In. diam. for seat ring:	380,1
Abrasive wear:	OK
D5	350

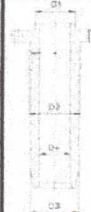
Remarks:

L1=1100

L2=60

P1=OK

Guide Bush



Component marking:

MWH M2528-3

Rubi-No.	35125.5
Inner diameter D4:	75,05
Outer diameter D2:	120,01
Outer diameter D3:	115,03

Remarks:

Inner bore D4 found with scuffing and pitting.

Oil Piston



Component marking:

K3

Rubi-No.	31048,6
Outer diameter D1:	119,90
Inner diameter D2:	56,1
Piston ring upper:	OK
Piston ring lower:	OK

Bush

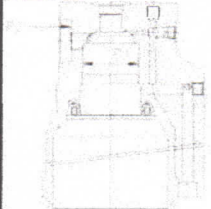


Component marking:

Y5

Rubi-No.	35125.6
Inner diameter D4:	120,05
Crack detected P1:	OK

Oil cylinder



Component marking:

NO.3 T63 18-1-92

Rubi-no.	35125.7
Flatness P2:	OK
Inner diameter P1:	150,01
Crack detected P1:	OK

Remarks:

Damping element



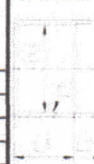
Component marking:

T3

Rubi-No.	31048,7
Length L2:	110
Outer diameter D1:	55,21
Outer diameter D2:	59,47

Remarks:

Air cylinder



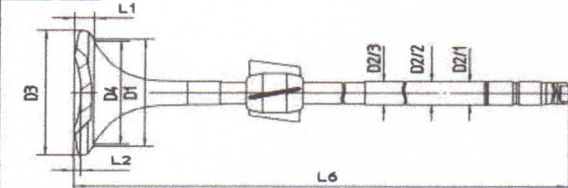
Component marking:

N4

Rubi-No.	28532,0
Length L1:	295
Inner diameter D3:	270,03
Crack detected D3:	OK

Remarks: Worn diameter: 270.39 mm
NOK - Upper bore noted worn out
Require rechroming/reconditioning

Valve Spindle



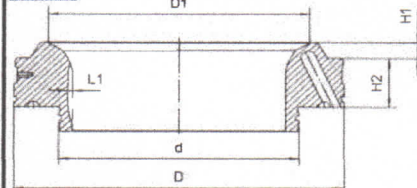
Component marking:

41172 7 30957

	RUBI-IN	RUBI-OUT
Rubi-No.	35125.8	
Overall length L6:	1639	
Height of valve head L1:	38,8	
Head surface burnt depth L2:	6	
Calculation head burnt depth L3:	12,7	
Stem diameter D2 / 1:	74,71	
Stem diameter D2 / 2:	74,79	
Stem diameter D2 / 3:	74,79	
Seat edge diameter D1:	350	
Seat angle:		
Head diameter D3:	402,7	
Seat inner dia. / Dia. underhead radius D4:	350	
Depth of seat blow- by L4:		
Length of seat blow- by L5:		

Remarks:

Seat Ring



Component marking:

B106 10-91

	RUBI-IN	RUBI-OUT
Rubi-No.	35125.9	
Outer diameter D:	499,5	
Outer diameter d:	380,15	
Inner diameter D1:	399,2	
Length H1:	25	
Length H2:	70	
Seat crack detected:	OK	
Seat angle:		
Depth of seat blow-by L2:	-	
Length of seat blow-by L3:	-	
Abrasive wear in inner dia. L1:	5	

Remarks:

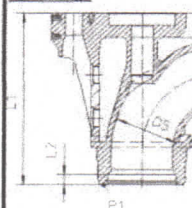
Exhaust Valve Overhaul



Customer: XXXXXXXXXX Vessel: XXXXXXXXXX Date: 19.02.2011
 Engine Type: RTA 72 WE: 19831 Inspected By: Roslan

Unit No. 3

Valve Cage



Component marking:

9M15 23607.8

Rubi-no.	35126.0
In. diam. for seal ring:	380,08
Abrasive wear:	OK
D5	350

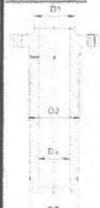
Remarks:

L1=1100

L2=60

P1=OK

Guide Bush



Component marking:

M4291-06-5

Rubi-No.	35126.1
Inner diameter D4:	75,05
Outer diameter D2:	120,01
Outer diameter D3:	115,03

Remarks:

Inner bore D4 found with scuffing and pitting.

Oil Piston

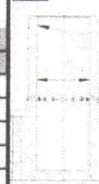


Component marking:

L5

Rubi-No.	24719.3
Outer diameter D1:	119,9
Inner diameter D2:	55,9
Piston ring upper:	OK
Piston ring lower:	OK

Bush

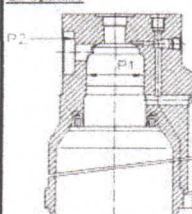


Component marking:

K4

Rubi-No.	24718.8
Inner diameter D4:	120,03
Crack detected P1:	OK

Oil cylinder



Component marking:

NO.5 T65 9-5-92

Rubi-no.	35126.2
Flatness P2:	OK
Inner diameter P1:	150,01
Crack detected P1:	OK

Remarks:

Damping element



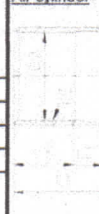
Component marking:

NA

Rubi-No.	24720.5
Length L2:	110
Outer diameter D1:	55,17
Outer diameter D2:	59,47

Remarks:

Air cylinder



Component marking:

C1 35126.3

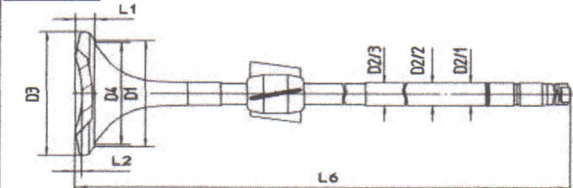
Rubi-No.	35126.3
Length L1:	295
Inner diameter D3:	270,015
Crack detected D3:	OK

Remarks: Worn diameter: 270.48 mm

NOK - Upper bore noted worn out.

Require rechroing/reconditioning

Valve Spindle



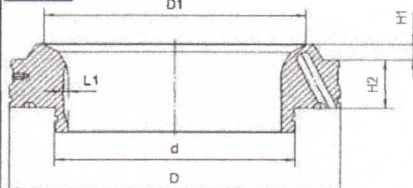
Component marking:

41172 5 30916

	RUBI-IN	RUBI-OUT
Rubi-No.	35126.4	
Overall length L6:	1638	
Height of valve head L1:	39	
Head surface burnt depth L2:	5,8	
Calculation head burnt-depth L3:	12,3	
Stem diameter D2 / 1:	74,50	
Stem diameter D2 / 2:	74,79	
Stem diameter D2 / 3:	74,78	
Seat edge diameter D1:	350	
Seat angle:		
Head diameter D3:	402,8	
Seat inner dia. / Dia. underhead radius D4:	350,4	
Depth of seat blow- by L4:		
Length of seat blow- by L5:		

Remarks:

Seat Ring



Component marking:

B029 10-89 23701.1

	RUBI-IN	RUBI-OUT
Rubi-No.	35126.5	
Outer diameter D:	499,5	
Outer diameter d:	380,14	
Inner diameter D1:	399,5	
Length H1:	25	
Length H2:	70	
Seat crack detected:	OK	
Seat angle:		
Depth of seat blow-by L2:		
Length of seat blow-by L3:		
Abrasive wear in inner dia. L1:	INSERT TYPE	

Remarks:

L1 found modified with insert sleeve.

Exhaust Valve Overhaul



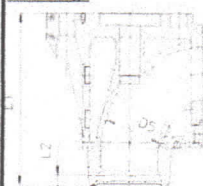
Customer : **Chevron**
Engine Type: RTA 72

Vessel: **Mar Vojage**
WE: 19832

Date: 19.02.2011
Inspected By: Roslan

Unit No. 4

Valve Cage



Component marking:
RAST 3415U1702, No.2 T36-2 DU
31-1-92

Rubi-no.	30555.9
In. diam. for seat ring:	380,09
Abrasive wear:	OK
D5	350

Remarks:

L1=1100

L2=60

P1=OK

Guide Bush



Component marking:

41071 M 4974-3

Rubi-No.	35126.6
Inner diameter D4:	75,03
Outer diameter D2:	120,01
Outer diameter D3:	115,03

Remarks:

Inner bore D4 found with scuffing and pitting.

Oil Piston



Component marking:

K4

Rubi-No.	35126.7
Outer diameter D1:	119.89
Inner diameter D2:	55,9
Piston ring upper:	OK
Piston ring lower:	OK

Bush

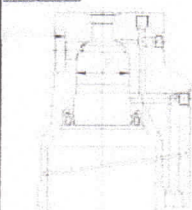


Component marking:

Y4

Rubi-No.	35126.8
Inner diameter D4:	120,04
Crack detected P1:	OK

Oil cylinder



Component marking:

NO.4 T36 18-1-92

Rubi-no.	35126.9
Flatness P2:	OK
Inner diameter P1:	150,01
Crack detected P1:	OK

Remarks:

Damping element



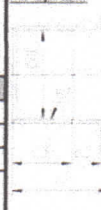
Component marking:

T4

Rubi-No.	35127.0
Length L2:	110
Outer diameter D1:	55,19
Outer diameter D2:	60,01

Remarks:

Air cylinder



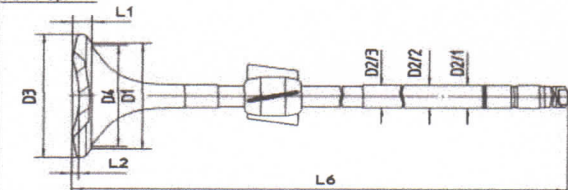
Component marking:

B7

Rubi-No.	35127.1
Length L1:	295
Inner diameter D3:	270,04
Crack detected D3:	OK

Remarks:

Valve Spindle



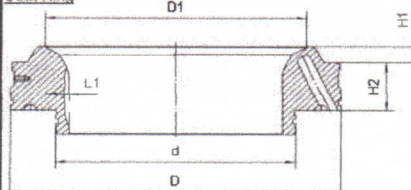
Component marking:

41172 20 30957

	RUBI-IN	RUBI-OUT
Rubi-No.	35127.2	
Overall length L6:	1645	
Height of valve head L1:	45	
Head surface burnt depth L2:	2,5	
Calculation head burnt-depth L3:	3	
Stem diameter D2 / 1:	74,78	
Stem diameter D2 / 2:	74,79	
Stem diameter D2 / 3:	74,78	
Seat edge diameter D1:	351	
Seat angle:		
Head diameter D3:	405,5	
Seat inner dia. / Dia. underhead radius D4:	350	
Depth of seat blow-by L4:		
Length of seat blow-by L5:		

Remarks:

Seat Ring



Component marking:

MWH 41223 3 30934

	RUBI-IN	RUBI-OUT
Rubi-No.	35127.3	
Outer diameter D:	499,5	
Outer diameter d:	380,15	
Inner diameter D1:	394	
Length H1:	25	
Length H2:	70	
Seat crack detected:	OK	
Seat angle:		
Depth of seat blow-by L2:		
Length of seat blow-by L3:		
Abrasive wear in inner dia. L1:	4,7	

Remarks:

Exhaust Valve Overhaul



Customer: **Chetron** Vessel: **Alair Voyson** Date: **19.02.2011**
 Engine Type: **RTA 72** WE: **19833** Inspected By: **Roslan**

Unit No. 5

Valve Cage

Component marking:
 RAST 3415U170, No.7 T30-1 DU
 31-1-92

Rubi-no.	35127.4
In. diam. for seat ring:	380,08
Abrasive wear:	OK
D5	350

Remarks:

L1=1100
 L2=60
 P1=OK

Guide Bush

Component marking:
 D7

Rubi-No.	35127.5
Inner diameter D4:	75,04
Outer diameter D2:	120,01
Outer diameter D3:	115,03

Remarks:

Inner bore D4 found with scuffing.

Oil Piston

Component marking:
 K7

Rubi-No.	35127.8
Outer diameter D1:	119,89
Inner diameter D2:	55,9
Piston ring upper:	OK
Piston ring lower:	OK

Bush

Component marking:
 Y2

Rubi-No.	35127.7
Inner diameter D4:	120,03
Crack detected P1:	OK

Oil cylinder

Component marking:
 NO.7 T63 18-1-92

Rubi-no.	35127.8
Flatness P2:	OK
Inner diameter P1:	150,01
Crack detected P1:	OK

Remarks:

Damping element

Component marking:
 T7

Rubi-No.	35127.9
Length L2:	110
Outer diameter D1:	55,18
Outer diameter D2:	59,47

Remarks:

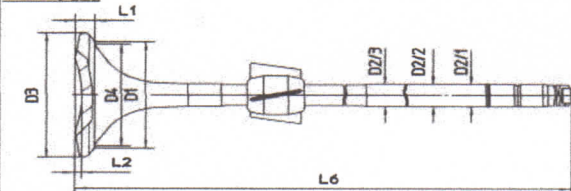
Air cylinder

Component marking:
 D4

Rubi-No.	30559.5
Length L1:	295
Inner diameter D3:	270,06
Crack detected D3:	OK

Remarks:

Valve Spindle

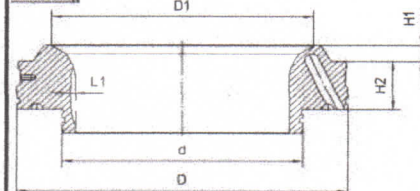


Component marking:

41172 6 30916	RUBI-IN	RUBI-OUT
Rubi-No.	35128.0	
Overall length L6:	1640	
Height of valve head L1:	38,5	
Head surface burnt depth L2:	4,5	
Calculation head burnt depth L3:	11,5	
Stem diameter D2 / 1:	74,78	
Stem diameter D2 / 2:	74,78	
Stem diameter D2 / 3:	74,78	
Seat edge diameter D1:	349,7	
Seat angle:		
Head diameter D3:	403,4	
Seat inner dia. / Dia. underhead radius D4:	350	
Depth of seat blow- by L4:	-	
Length of seat blow- by L5:	-	

Remarks:

Seat Ring



Component marking:

B107 10-91	RUBI-IN	RUBI-OUT
Rubi-No.	35128.1	
Outer diameter D:	499,5	
Outer diameter d:	380,13	
Inner diameter D1:	397,2	
Length H1:	25	
Length H2:	70	
Seat crack detected:	OK	
Seat angle:		
Depth of seat blow-by L2:	-	
Length of seat blow-by L3:	-	
Abrasive wear in inner dia. L1:	INSERT TYPE	

Remarks:

L1 found modified with insert sleeve.

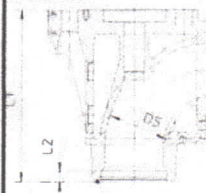
Exhaust Valve Overhaul



Customer: **Chevrolet** Vessel: **Alair Voyage** Date: **19.02.2011**
 Engine Type: **RTA 72** WE: **19834** Inspected By: **Roslan**

Unit No. 6

Valve Cage



Component marking:
 RAST 3415U170, No.9 T59-3 DU
 31-1-92

Rubi-no.	35128.2
In. diam. for seat ring:	380,09
Abrasive wear:	OK
D5	350

Remarks:

L1=1100

L2=60

P1=OK

Guide Bush



Component marking:

D9

Rubi-No.	35128.3
Inner diameter D4:	75,04
Outer diameter D2:	120,01
Outer diameter D3:	115,03

Remarks:

Inner bore D4 found with scuffing.

Oil Piston

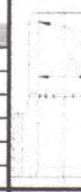


Component marking:

M6

Rubi-No.	30405.3
Outer diameter D1:	119,89
Inner diameter D2:	55,9
Piston ring upper:	OK
Piston ring lower:	OK

Bush

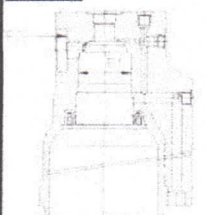


Component marking:

K6

Rubi-No.	30405.2
Inner diameter D4:	120,05
Crack detected P1:	OK

Oil cylinder



Component marking:

NO 6 T66

Rubi-no.	35128.4
Flatness P2:	OK
Inner diameter P1:	150,01
Crack detected P1:	OK

Remarks:

Damping element



Component marking:

V6

Rubi-No.	35128.5
Length L2:	110
Outer diameter D1:	55,18
Outer diameter D2:	60,05

Remarks:

Air cylinder



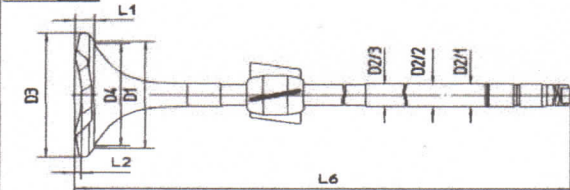
Component marking:

B9

Rubi-No.	35128.6
Length L1:	295
Inner diameter D3:	270,04
Crack detected D3:	OK

Remarks:

Valve Spindle



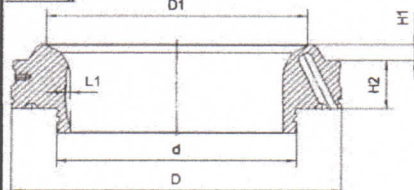
Component marking:

557 B109 10-91 TE-O

	RUBI-IN	RUBI-OUT
Rubi-No.	35128.7	
Overall length L6:	1639	
Height of valve head L1:	39,5	
Head surface burnt depth L2:	8,5	
Calculation head burnt-depth L3:	14,5	
Stem diameter D2 / 1:	74,490	
Stem diameter D2 / 2:	74,775	
Stem diameter D2 / 3:	74,760	
Seat edge diameter D1:	349,8	
Seat angle:		
Head diameter D3:	403	
Seat inner dia. / Dia. underhead radius D4:	350	
Depth of seat blow- by L4:		
Length of seat blow- by L5:		

Remarks:

Seat Ring



Component marking:

B109 10-91

	RUBI-IN	RUBI-OUT
Rubi-No.	35128.8	
Outer diameter D:	499,5	
Outer diameter d:	380,135	
Inner diameter D1:	395	
Length H1:	25	
Length H2:	70	
Seat crack detected:	OK	
Seat angle:		
Depth of seat blow-by L2:	-	
Length of seat blow-by L3:	-	
Abrasive wear in inner dia. L1:	5	

Remarks: