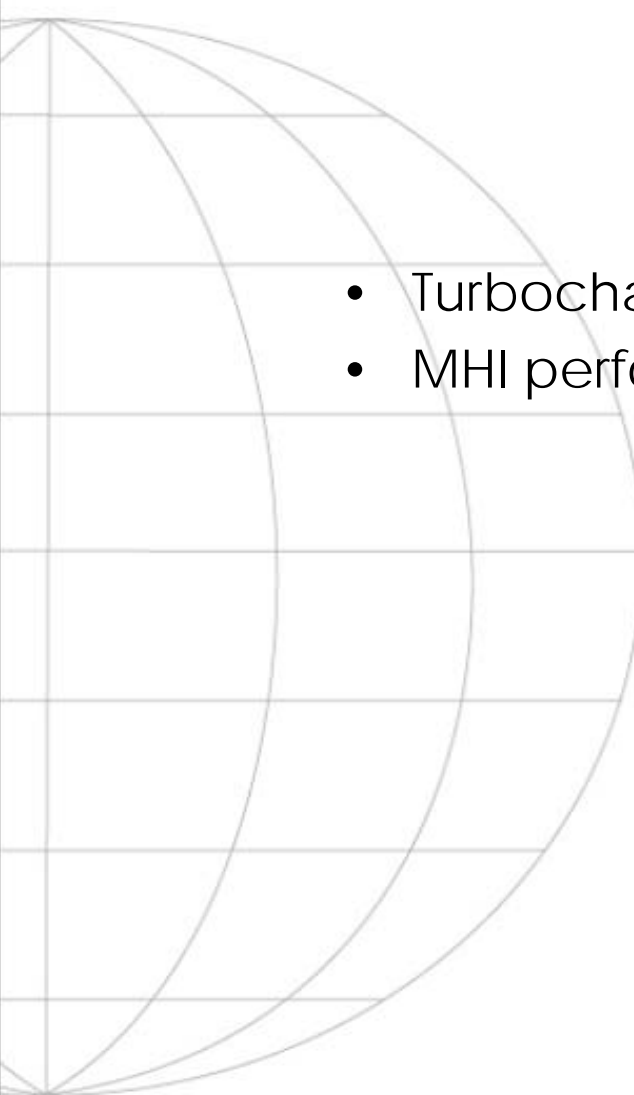


# **MITSUBISHI** TURBOCHARGERS



**PERFORMANCE PARTS**

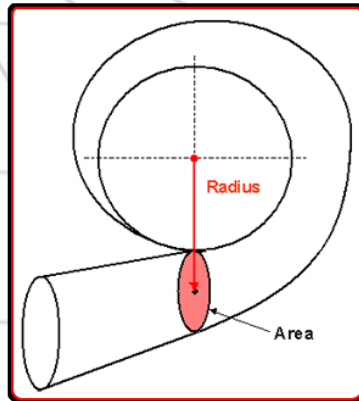
# Turbo charger Line-up

- 
- A wireframe globe is positioned on the left side of the slide, showing a grid of latitude and longitude lines. It is partially cut off by the left edge of the frame.
- Turbocharger specifications
  - MHI performance Turbochargers

# Compressor characteristics

Frame	Compressor	Max Boost, bar abs	Surge	Choke	Compressor		Power indication, hp
			Min flow, m <sup>3</sup> /s / 2bar abs	Max flow, m <sup>3</sup> /s / 2bar abs	Inducer, mm	Exducer, mm	
TD025	04T4	3.1	0.025	0.08	26.6	40.0	50-100
TD025	06T4	2.9	0.025	0.09	29.0	40.0	60-130
TD025	07T	2.6	0.029	0.10	30.0	40.0	70-140
TD03	08G	2.6	0.033	0.12	34.1	44.0	80-155
TD03	10TK3	2.7	0.034	0.13	35.6	46.0	90-170
TD04	10T	2.7	0.040	0.14	35.5	49.0	110-190
TD04	12T	2.7	0.045	0.15	37.8	49.0	130-200
TD04	13T	2.8	0.046	0.16	38.3	51.0	140-220
TD04	14T	2.8	0.048	0.18	39.5	51.0	150-230
TD04H	15T	3.0	0.055	0.20	42.0	56.0	160-240
TD04H	15TK31	3.3	0.050	0.21	42.0	56.0	180-260
TD04H	16GK	3.1	0.063	0.20	43.4	56.0	170-260
TD04H	16T	3.0	0.056	0.21	43.4	56.0	200-270
TD04H	18T	3.0	0.054	0.22	45.0	58.0	220-290
TD04H	19T	3.0	0.050	0.22	46.0	58.0	230-300
TD04H	19TK3S	3.3	0.064	0.23	45.0	58.0	240-315
TD04H	20TK32S	3.3	0.064	0.24	47.0	58.0	250-330
TD05	16G	2.9	0.070	0.25	46.5	60.0	260-360
TD05H	16G6	3.5	0.080	0.28	48.3	68.0	270-380
TD06H	18G	2.9	0.080	0.25	50.5	68.0	300-400
TD06H	20G	2.9	0.090	0.30	52.6	68.0	300-430

# Turbine characteristics



Frame	Turbine, cm <sup>2</sup>
TD025M	2.3
TD025	2.7
TD03	4.8
TD03L4	4.9
TD04	5
TD04	6
TD04	7
TD04	8
TD04	8.5
TD04	10.5
TD04	11
TD05	6
TD05	7
TD05	8
TD05	9.8
TD05	10.5
TD06	8
TD06	12
TD06	14
TD06	16

Frame	Diameter, mm	Exducer, mm
TD025M	37	31.5
TD025	37	28.0
TD03	40	35.1
TD03L4	40	35.1
TF035	40	35.1
TD04	47	40.0
TD04L	47	41.2
TD04L6	47	41.2
TD04H	52	45.6
TD04HL	52	45.6
TD04HL4A	52	45.6
TD05	56	47.6
TD05H	56	49.1
TD06	65	55.2
TD06H	67	58.8

# MHI line-up code explanation

## TD04(H)(L)(R)-08T-6.5

### Turbochargerr:

**T** = Exhaust Gas Turbocharger

**D** = Turbo design series (not alphabetical)

**04** = Turbine wheel frame size

**H** = Optional suffix for enlarged diameter:

### Compressor:

**08** = Compressor size:

At the highest efficiency on the compression line ratio

$\pi = 2$ , the air flow is **0.08** m<sup>3</sup>/sec.

**T** = Compressor Wheel design type (not alphabetical)

### Turbine:

**L** = Optional suffix for wheel width:

**S** = small

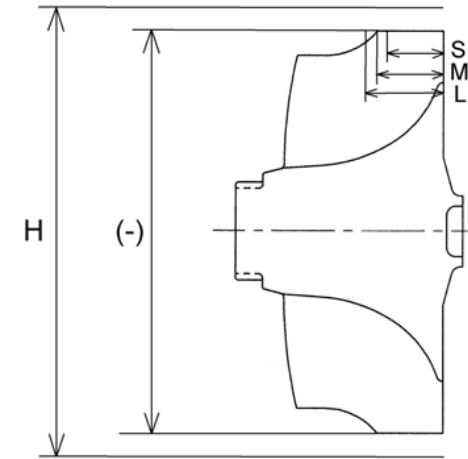
**M** = medium

**L** = large

**R** = Optional suffix for reverse rotation direction

**6.5** = Turbine Housing throat area = 6.5 cm<sup>2</sup>

(this is the dimension A in A/R) or **VG** for Variable Geometry  
or total area plus suffix **T/S** for Twin Scroll housing



### Hybrid Turbocharger:

When using a Compressor wheel from an other Turbine series, it is called a hybrid Turbocharger, for example :

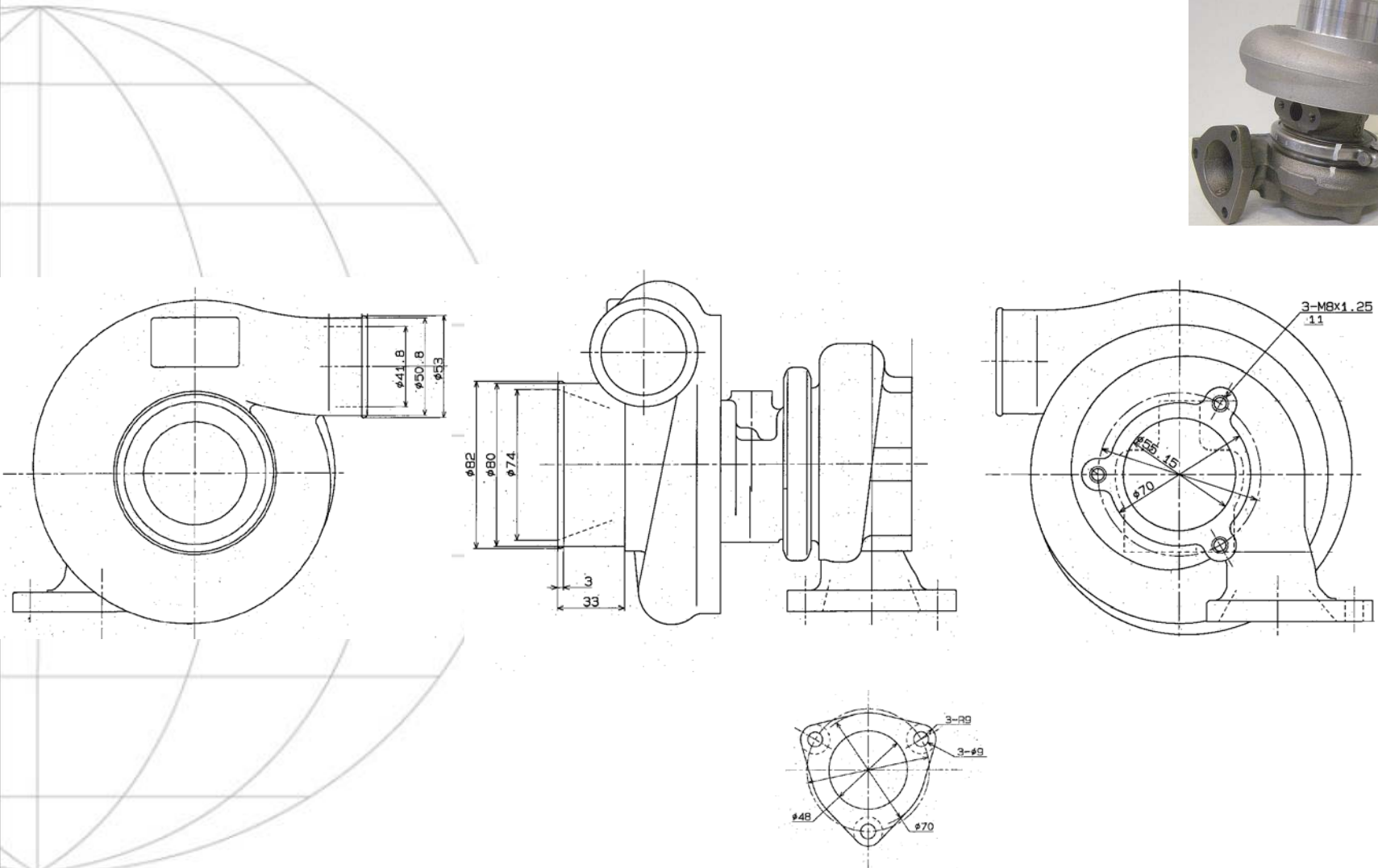
**TD04-04H\*13T-6.5 T/S**

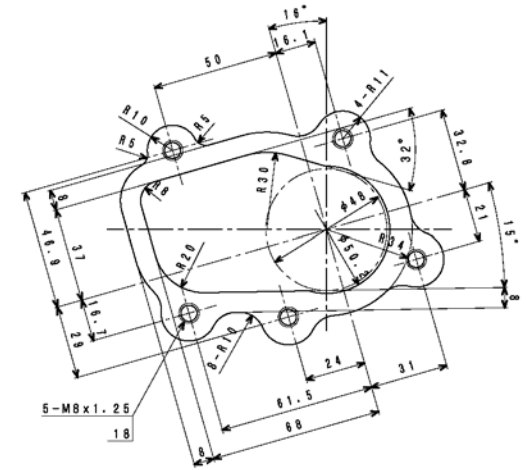
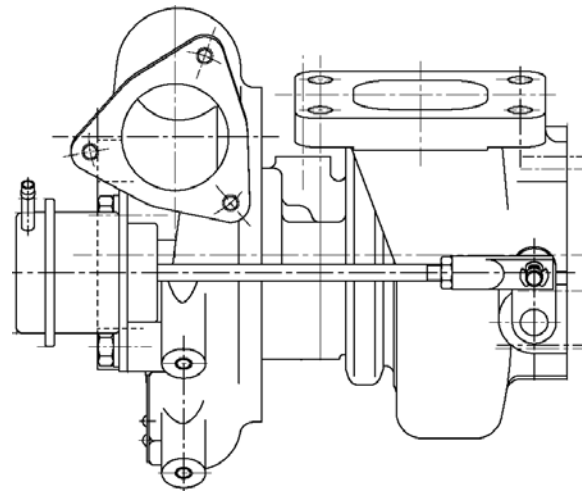
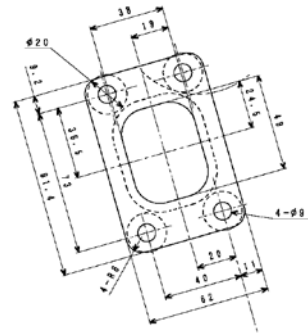
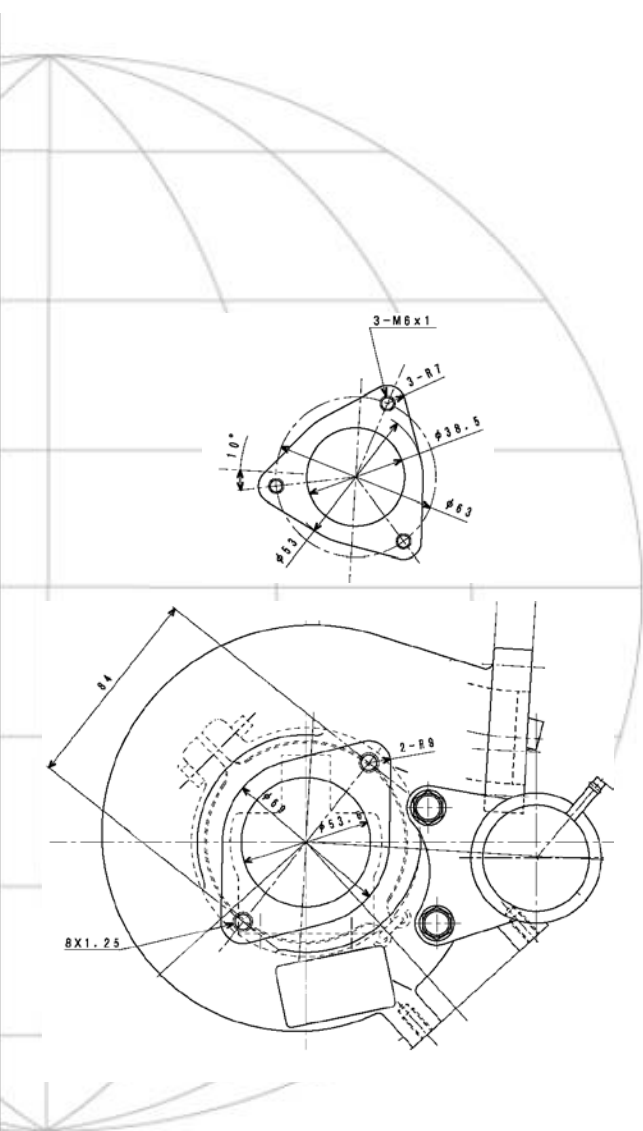
In this example a 13T compressor from the TD04H<sub>series</sub> is combined with a TD04 series turbine.

# MHI Performance Turbochargers

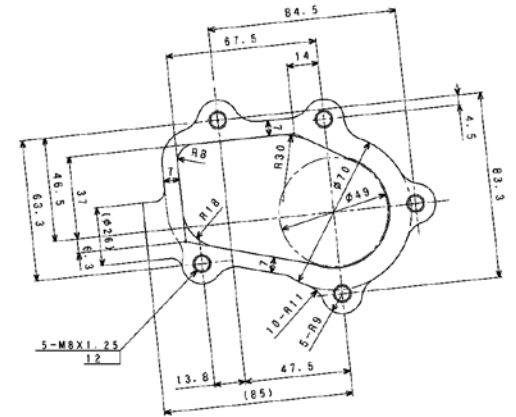
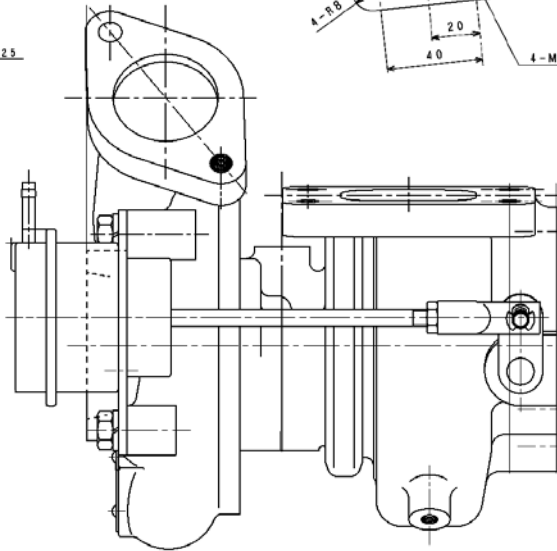
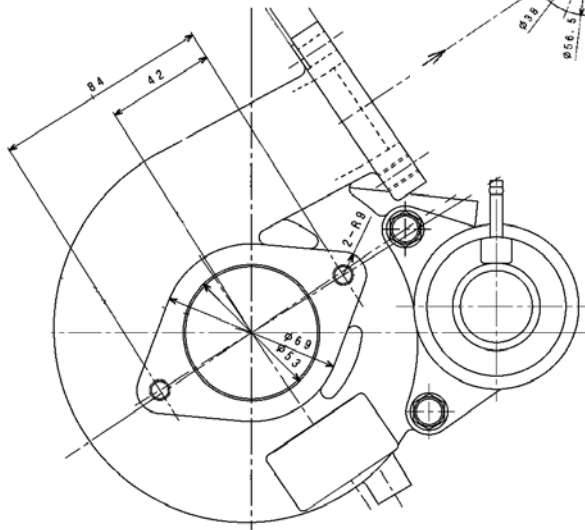
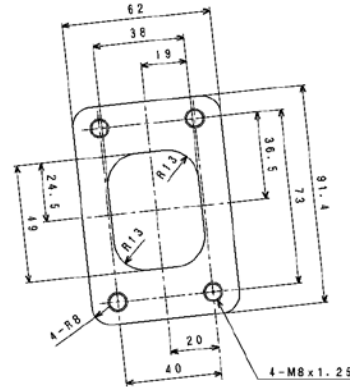
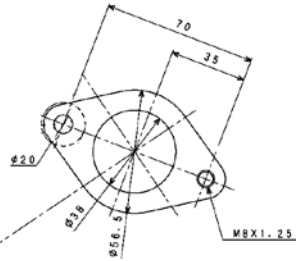
P/N	Model & Spec	Actuator setting (Kpa), P1@1m m P2@5m m
49S78-05100	TD05H-06*18G(8.0cm <sup>2</sup> )	no actuator
49S78-05170	TD05H-06*18G(8.0cm <sup>2</sup> )	P1 = 50.7 P2 = 66.7
49S78-05180	TD05H-06*18G(10.0cm <sup>2</sup> )	P1 = 50.7 P2 = 66.7
49S78-05190	TD05H-06*18G(8.0cm <sup>2</sup> )	P1 = 100 P2 = 117.3
49S78-05300	TD05H-06*16G(10.0cm <sup>2</sup> )	P1 = 100 P2 = 117.3
49S78-05210	TD05H-06*18G(8.0cm <sup>2</sup> )	P1 = 87.5
49S78-05220	TD05H-06*18G(8.0cm <sup>2</sup> )	P1 = 50.7 P2 = 66.7
49S78-05400	TD05H-06*18G(8.0cm <sup>2</sup> )	P1 = 108
49S79-01160	TD06H-20G(8.0cm <sup>2</sup> )	no actuator
49S79-01200	TD06-20G(8.0cm <sup>2</sup> )	no actuator
49S79-01190	TD06H-20G(16.0cm <sup>2</sup> )	no actuator
49S79-01230	TD06L2-20G(8.0cm <sup>2</sup> )	no actuator
49S78-05120	TD05H-06*18G(10.0cm <sup>2</sup> )	P1 = 50.7 P2 = 66.7

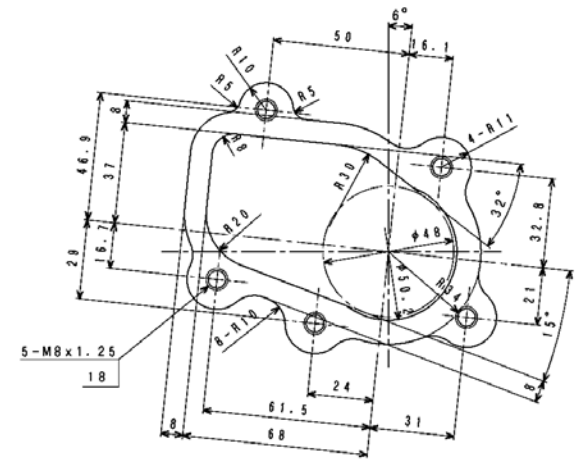
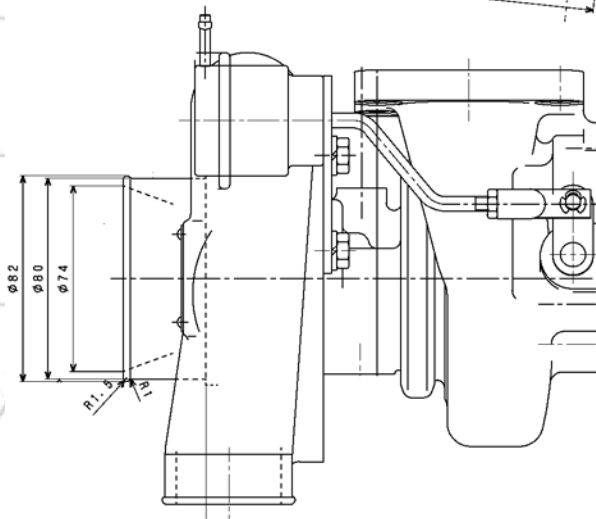
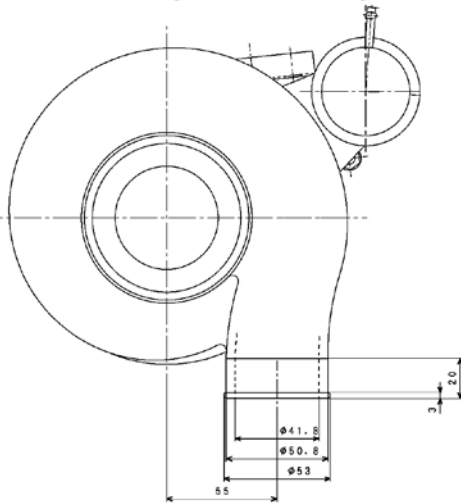
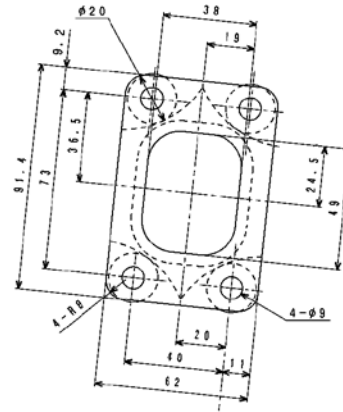




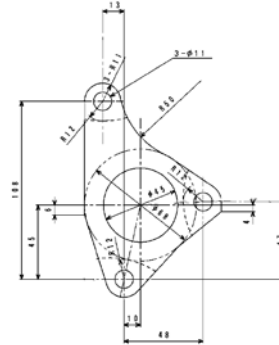
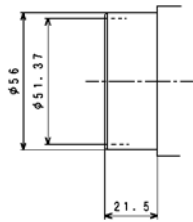
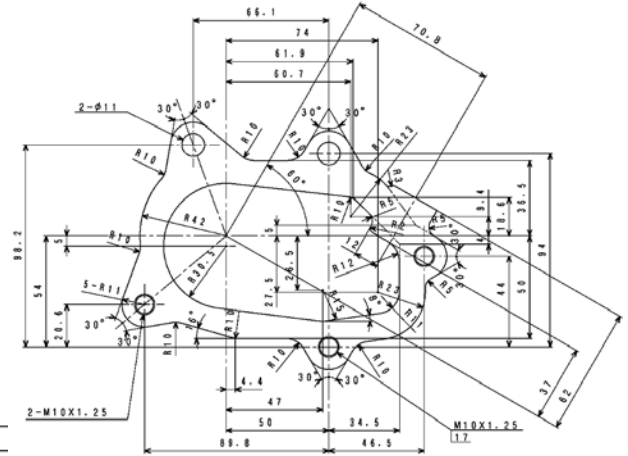
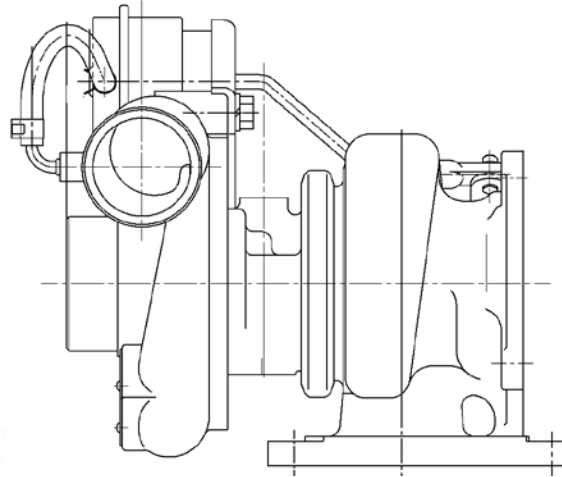
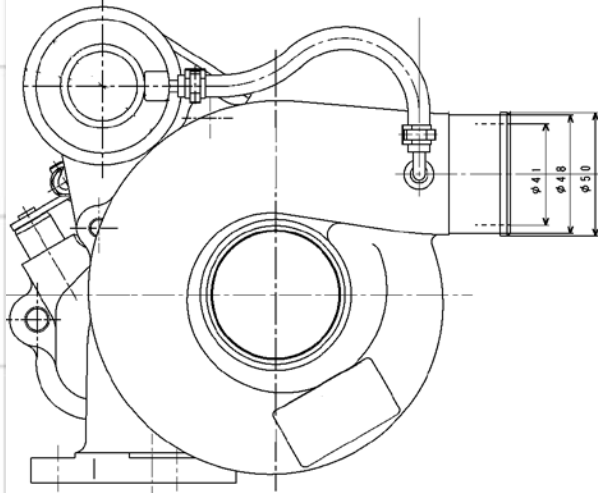


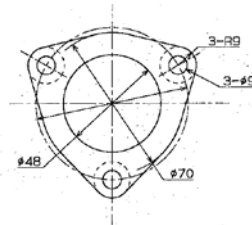
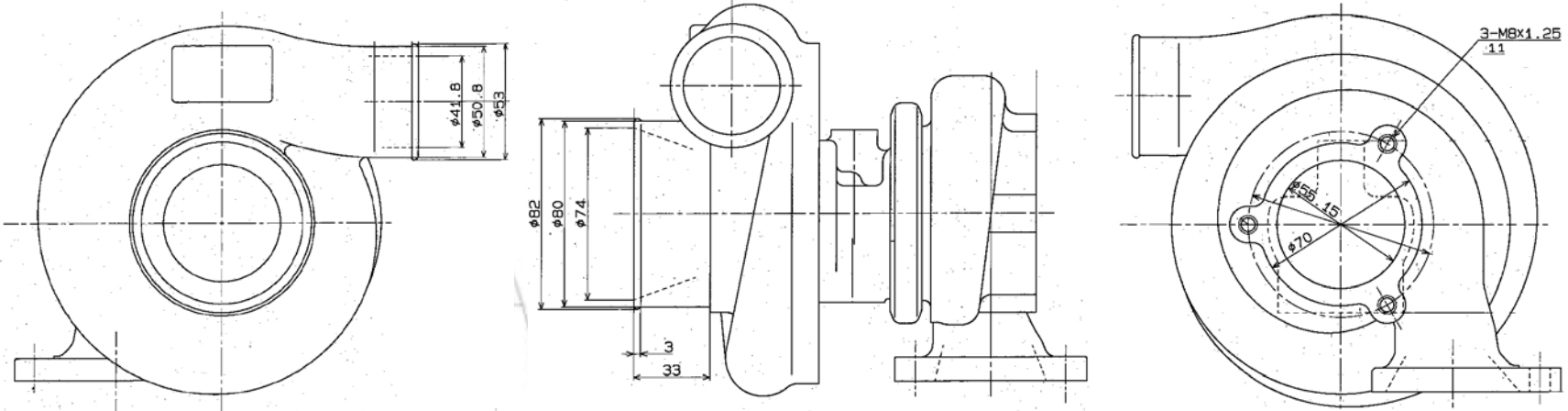




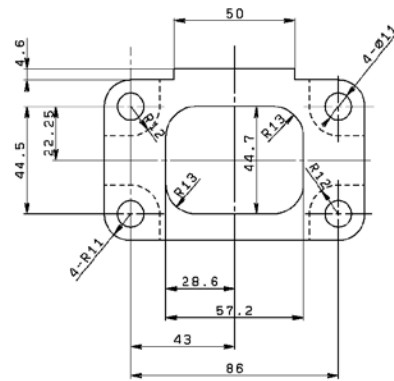
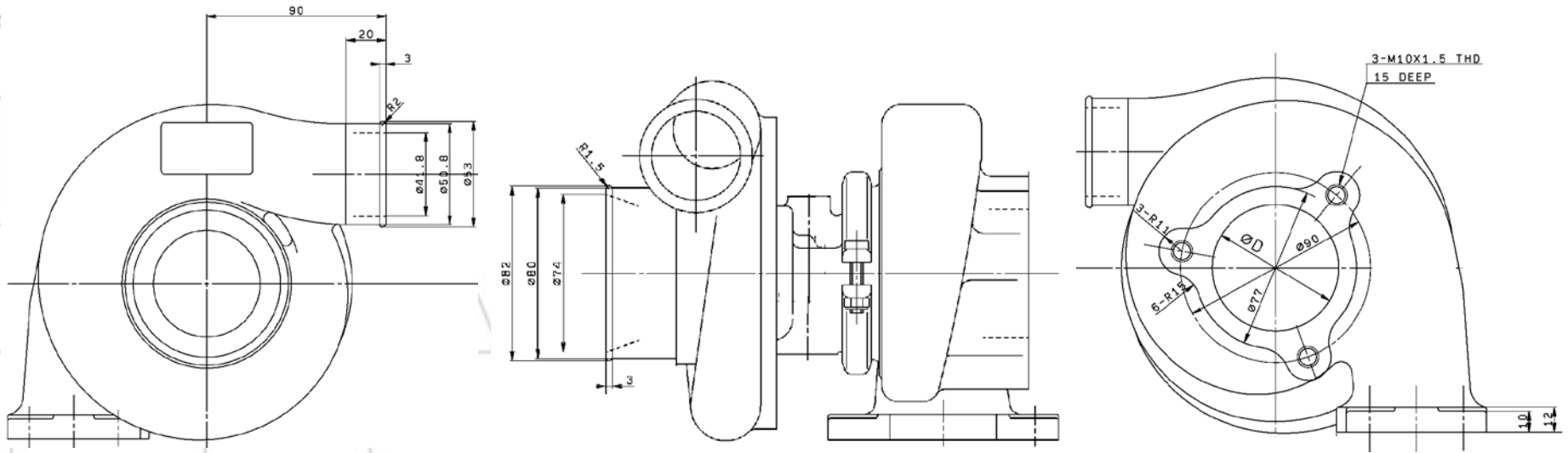


# 49S78-05400 (Subaru upgrade)





49S79-01190 / 49S79-01200





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