Forged Milled Compressor Wheels (FMW)

EFR turbos contain wheels that are fully milled from forged aluminum, commonly known as 'billet'. Cut from custom forgings, their strength exceeds that which is available from typical bar-stock and also exceeds the material properties of an aluminum casting.

Gamma Ti turbine Wheel & Shaft

Gamma-Ti turbine wheel cuts turbine inertia by roughly 50% dramatically improving turbo response. Turbine sizes range from 58 to 80mm in tip diameter.



Stainless steel turbine housings

Stainless steel turbine housings improve durability in high-temperature applications and offer superior corrosion resistance as well as being cast with thin walls to reduce weight and thermal inertia. All EFR turbine housings are offered with industry standard connection flanges, select configurations available with V-band inlet and outelets for improved mounting freedom.

> **High Flow Wastegates** Purpose designed large wastegate ports give the wastegated EFR turbos

the capability of

handling the flow

performance

applications.

High Turbine Efficiency The EFR turbine wheels have the characteristic of very high efficiencies and have been

paired with our 'Superback'

shape adds a curved profile

to the backdisk and has the

effect of lowering centrifugal

Select sizes available with

Mixed Flow Turbine (MFT)

geometry to further enhance

durability, lower inertia, and

improve exhaust pulse respnse.

and 'Fullback' back-disk

shapes. The Superback

rotational speeds.

requirements of high

Boost Control Solenoid Valve (BCSV)

Sensor Mounting

Convenience

Speed sensor

provisions are

compressor

separately.

cover. Speed

sensors are sole

aslo supplied on

mounting

every

A boost control solenoid valve (BSCV) is included with every EFR turbo.

Enhanced Turbo Response

EFR turbochargersuse a dual-row ball bearing cartridge with ceramic balls and metal cage. This bearing system provides substantial friction reductionat low turbo speeds and in the process helps improve turbo response.

Simplified Installation

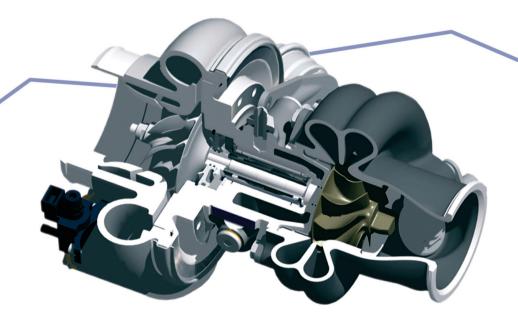
Integrated compressor recirculation valve (CVR) to help avoid compressor surge and backflow during a throttle lift event. This feature helps to simplify the installation task and lowers overall system install cost.

Ease of Orientation

Turbo orientation flexibility is facilitated by the wastegate bracket to bearing housing mounting arrangement, allowing freedom to locate the end housings independent of the wastegate canister.

Flexible Compressor Cover The 'large' cover has a dual-

machined outlet, both for a hose connection and a vband connection



Adjustable Wastegate

The fabrication and installation task is simplified with wastegated EFR models that feature adjustable wastegates available in several canister spring options, which provide base pressure settings ranging from 6-45 psi.

