

Engine Systems Portfolio



Commercial Aero Engines

Engine components + MRO	Fan/compressor cases	Bearings/housings	Hubs	Discs/blisks/seals	Spools	Fan/compressor structures	Compressor rear frame/Diffuser cases	Low pressure turbine cases (LPTs)	Turbine structures	Shafts	Vanes	Other parts	MRO
AE3007	■					■						■	●
Tay												■	
RB211													●
Trent 700	■					■							
Trent 800													●
Trent 900	■					▲ ■							
Trent 1000	■						■				■	■	
Trent 7000	■						■				■		
Trent XWB				■		▲ ■		■				■	
V2500	■	■						■	■			■	●
PW600							■						
PW4000	■		■	■				■	■				
PW6000										■			
PW1100G-JM		■				▲ ■			▲ ■	■	■	■	
PW1200G	■					▲ ■			▲ ■	■	■	■	
PW1400G		■				▲ ■			▲ ■	■	■	■	
PW1500G	■					▲ ■			▲ ■	■		■	
PW1700G	■					▲ ■			▲ ■	■	▲	■	
PW1900G	■					▲ ■			▲ ■	■	▲	■	
GP7000	■								▲ ■			■	
CF34	■											■	●
GE9x	■	■		■	▲ ■	▲			▲ ■			■	●
CF6-80	■	■		■	■		▲ ■	■		■		■	●
CFM56							■	■		■	■		●
LEAP							■	■					
GE90-115B	■		■			■	■	■		■		■	
GE9x	■											■	
Silvercrest								■					

Military Aero Engines

Engine components + MRO	Fan/compressor cases	Bearings/housings	Hubs	Discs/blisks/seals	Spools	Fan/compressor structures	Compressor rear frame/Diffuser cases	Low pressure turbine cases (LPTs)	Turbine structures	Shafts	Vanes	Other parts	MRO	Technical support
RM12	▲ ■	▲	▲ ■	▲ ■	▲ ■	▲ ■	▲	▲ ■	▲	▲	▲	▲	●	▼
F414	■						■					■		
F404				■								■		
F100	■					■		■		■		■		
F110	■			■			■			■	■	■		
F117/PW2000		■	■			■	■	■	■					
F119	■									■				
F135	■			■		■	■			■				

Gas Turbines

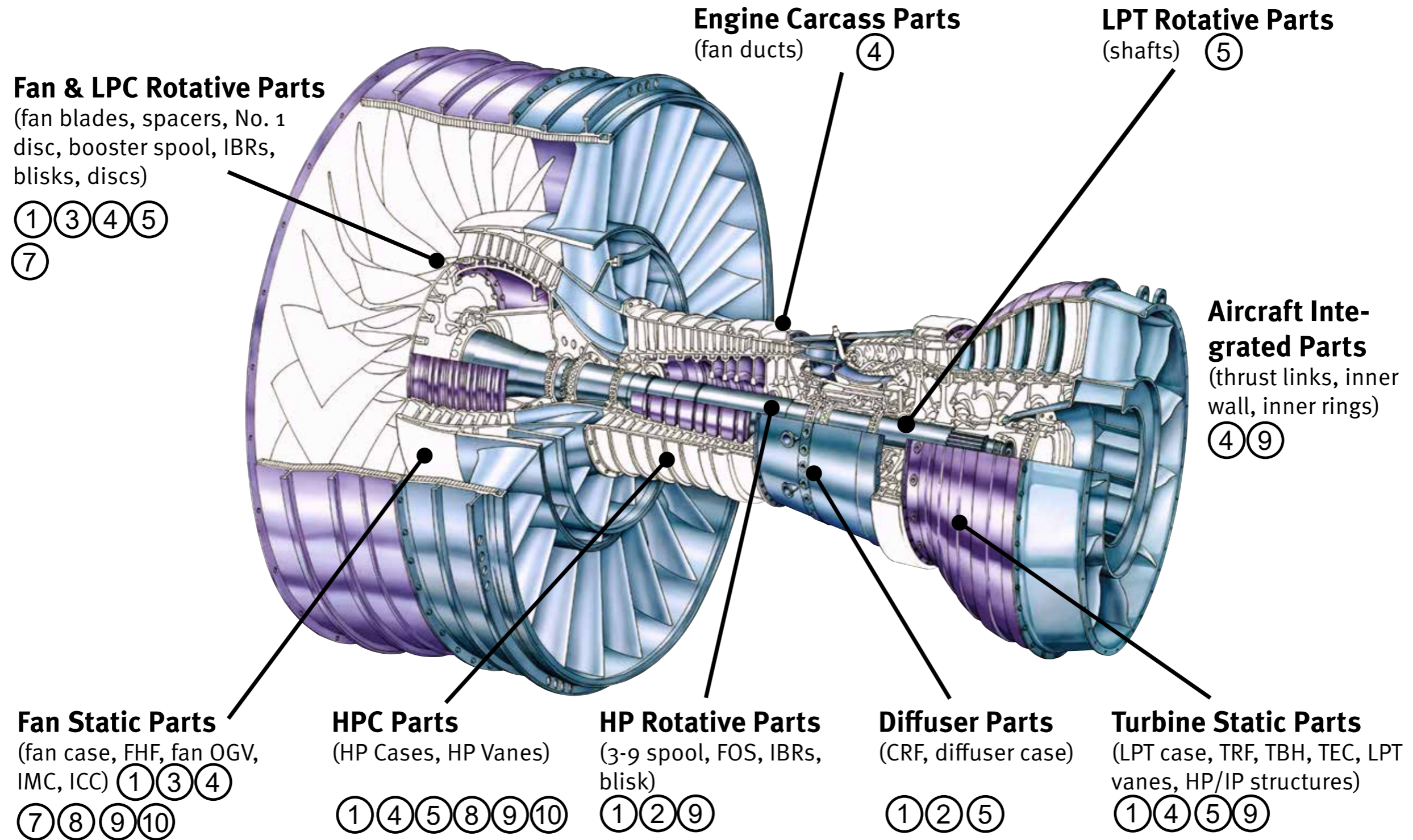
Engine components + MRO	Hubs	Discs	Spools	Fan/compressor structures	Compressor rear frame/Diffuser cases	Low pressure turbine cases (LPTs)	Turbine structures	Shafts	MRO
LM1600	■	■							●
LM2500		■	■						
LM6000			■		■	■			
LMS100					■	▲ ■	■		
FT8/GG8				■				■	
DR990									●

Rocket Engines

- ▲ Design/development/improvement
- Manufacturing
- ▼ Technical support
- MRO (Maintenance, repair, overhaul)

Engine systems/subsystems	Manufacturing	Product specialisation
Vulcain 2, turbines & nozzles	■	▲
Vinci, turbines	■	▲

Engine Product Portfolio



Abbreviations:

CRF	Compressor Rear Frame	HPC	High Pressure Compressor	IP	Intermediate Pressure	OGV	Outlet Guide Vanes
FHF	Fan Hub Frame	IBR	Integrally Bladed Rotor	IPT	Intermediate Pressure Turbine	TBH	Tail Bearing House
FOS	Forward Outer Seal	ICC	Intermediate Compressor Case	LPC	Low Pressure Compressor	TEC	Turbine Exhaust Case
HP	High Pressure	IMC	Intermediate Compressor	LPT	Low Pressure Turbine	TRF	Turbine Rear Frame

Production sites:

1	Trollhättan	5	Kongsberg	9	Newington
2	Cincinnati	6	Manchester	10	North Charlestown
3	Cromwell	7	Mexicali		
4	El Cajon	8	Muncie		

Aircraft Guide

Aircraft in which GKN Aerospace is involved, as engine or engine component manufacturer, or MRO supplier.



Airbus A380
GP7000, Trent 900



Airbus A350
Trent XWB



Airbus A330
CF6-80, PW4000, Trent 700



Airbus A330neo
Trent 7000



Airbus A320
CFM56, V2500



Airbus A320neo
PW1100G, LEAP-1A



Boeing 747-8
GENx



Boeing 787
GENx, Trent 1000



Boeing 777
GE90, PW4000, Trent 800



Boeing 777-9X
GE9X



Boeing 767
CF6-80, PW4000



Boeing 737MAX
LEAP-1B



Boeing 737
CFM56



Bombardier C-series
PW1500G



Bombardier Challenger 605
CF34



COMAC C919
LEAP-1C



Cessna Citation X
AE3007



Cessna Citation Hemisphere
Silvercrest



Dassault Falcon 5X
Silvercrest



Embraer 170/175/190/195 (E2)
CF34, (PW1700G, PW1900G)



Fokker 100
Tay 650



Gulfstream IV
Tay 611-8



Irkut MC-21
PW1400G



Mitsubishi MRJ (MITAC)
PW1200G



Boeing F-15 Eagle
F100



Boeing F/A-18 E/F Super Hornet
F414



Boeing C-17 Globemaster
F117/PW2000



Lockheed Martin F-35 JSF
F135

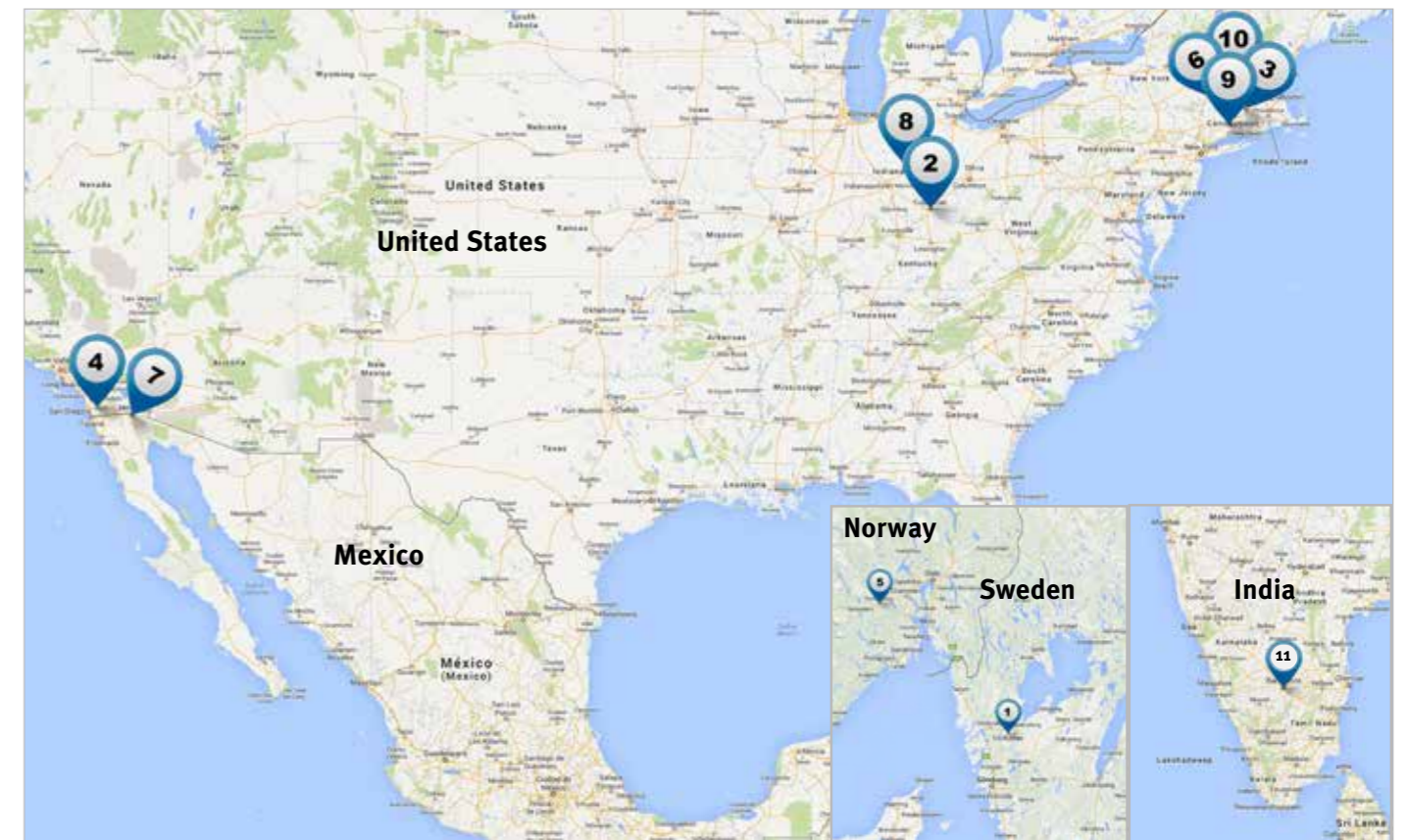


Lockheed F-16 Falcon
F110



Saab 39 Gripen
RM12 OEM

Aerospace Engine Systems Sites



- 1 Trollhättan, Sweden
- 2 Cincinnati, OH
- 3 Cromwell, CT
- 4 El Cajon, CA
- 5 Kongsberg, NO
- 6 Manchester, CT

- 7 Mexicali, Mexico
- 8 Muncie, IN
- 9 Newington, CT
- 10 North Charlestown, NH
- 11 Bangalore, India
Engineering office



GKN Aerospace

GKN Aerospace is a global first tier supplier of airframe structures, engine components, transparencies and fuel/flotation systems, with a global workforce of approximately 17,000. It has a significant participation on all major aircraft programmes today and a broad customer base spanning commercial, military, business aerospace and space markets.

The division's extensive engineering capability and clear focus on targeted innovation has created technological and manufacturing leads in each of its areas of expertise.

GKN Aerospace Engine Systems

GKN Aerospace Engine Systems develops and manufactures components for aircraft, gas turbines and rocket engines with high technology content in cooperation with the world's leading producers.

We offer an extensive range of services, including sales of spare parts for aircraft engines and aircraft, lease engine support, as well as overhaul and repair of aircraft engines and industrial gas turbines.

GKN Aerospace Engine Systems HQ

SE-461 81 Trollhättan, Sweden

+46 520 94000

gaes@gknaerospace.com

GKN TECHNOLOGY:
MAKING THINGS FLY