ISO 9001 : 2015 **C €** (EN-16092 : 2018) CSA Z142 NR 12



PRESSES

MECHANICAL HYDRAULIC & SERVO



ENGINEERING FOR EXCELLENCE



The Company has Customers in 90 Countries, across 6 Continents

Isgec Corporate Office at Noida (a suburb of New Delhi) India.

Other Businesses:

- Process Equipment
- EPC Projects
- Boilers
- Sugar Plants & Distilleries

ENGINEERING LTD. for the past 90 years.

Isgec Heavy Engineering Ltd. is a multi-product, multi-location public company that has been providing engineering solutions to customers around the world

Manufacturing Facilities:

- Mother Plant: Yamunanagar (Haryana) India
- Eagle Presses Plant: Windsor (Ontario) Canada
- · Coastal Plant: Dahej (Gujarat) India
- Boiler Manufacturing & Piping Plant: Rattangarh (Haryana) India
- Standard Mechanical Presses Plant: Bawal (Haryana) India
- Foundry: Muzaffarnagar (U.P.) India
- Castings
- Emission Control Solutions
- · Contract Manufacturing



We started production of Hydraulic Presses in 1968 with technical knowhow from John Shaw of UK (1967 to 1978) and of Mechanical Presses in 1985 with technical knowhow from Rovetta of Italy (1985 to 1997). We acquired **Eagle Press & Equipment Co. Ltd.**, a Windsor (Ontario) Canada based Press manufacturer in 2018. Eagle is now a wholly owned company of Isgec Heavy Engineering Ltd. We have experience of building over 5500 Presses, most of which have been supplied in the last 20 years.

Isgec Presses - References include

- · Ashok Leyland
- AK Pres
- Amvian
- BSH Household Appliances
- Big Rapids Products
- · Brandl Maschinenbau
- Benteler
- Bharat Forge
- BARC
- Caparo
- Camaco
- · CIE Automotive S.A.
- Farguell
- Ford Motors

- Force Motors
- Franke
- Gedia
- Gruppo Azpiaran
- GM de Mexico
- Hirotec
- Hindustan Aeronautics
- · Honda Motorcycle & Scooter
- · Honda Siel Cars
- H-One
- Hirschvogel
- IFB
- Indian Railways
- Isuzu

- JBM Group
- Kalyani
- Lear
- LuK
- Munjal
- · Mahindra & Mahindra
- Maruti Suzuki
- Magnetto
- Nagata
- Nissan
- Ogihara
- · Ordnance Factory Board
- Sangwoo Hitech
- Sankei

- Suzuki Motorcycle
- Satyam
- SKH Y-Tec
- Tata Motors
- Thai Summit
- ThyssenKrupp
- Topre
- Toyota
- TVS Group
- Unipres
- Uliana Metallurgica
- Valeo Group
- Vinfast
- Willmes Umformtechnik (UTW)
- Yutaka

Press Manufacturing Plants

Yamunanagar (Haryana) India

Bawal (Haryana) India

Windsor (Ontario) Canada

5500⁺ Presses 100⁺ Transfer Presses 100⁺ Press Lines

26 Countries

Plant at Bawal (Haryana) India for manufacturing Standard GAP Frame, H-Frame Mechanical Presses and Press Brakes



Plant at Windsor (Ontario) Canada for manufacturing Mechanical & Hydraulic Presses



USA • Canada • Germany • Brazil • China • Mexico • France • Spain • Sri Lanka • India • Iran • South Africa • Czech Republic • Slovakia

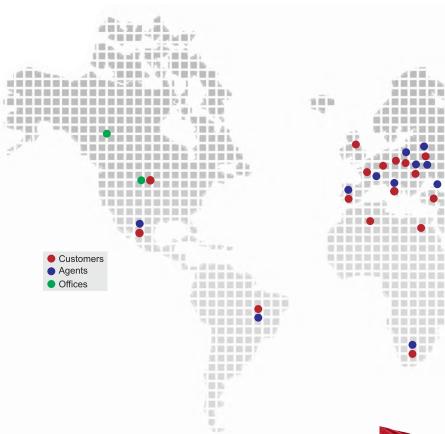
UK • Indonesia • Thailand • Turkey • Poland • Hungary • Romania • Egypt • Algeria • Saudi Arabia • Bangladesh • Vietnam

REACH



This extra rigid (deflection 0.07 mm / m) 630 T Mechanical Press, running at 100 SPM, is for Progressive Die Applications. It has been supplied in Brazil. Another 1500 T Hydraulic Press has also been supplied to the same customer.







1000T Hydraulic Press supplied to an Auto OEM in Vietnam for deep draw cross member chassis components



800 T Link Drive Progressive Die Mechanical Press with Bed Size 3500 mm x 1600 mm and 20-40 SPM, installed in Spain Also received repeat order of this press for their plant in Poland





630 T Automated Hydraulic Press supplied to German Multinational for their plant near Port Elizabeth, South Africa. This Press is fitted with Robots for loading & unloading of components. Repeat order was placed for their Plant in India and similar 1000 T and 800 T presses have also been supplied to same customer for their China facility.

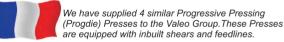




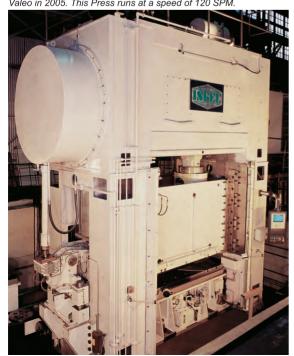








Two of these Presses of 1000 T capacity are installed in France The first one, supplied in the year 2000, is being run at a speed of 100 SPM. Subsequently we have supplied another 1000 T Press to Valeo in 2005. This Press runs at a speed of 120 SPM.



1200 T Transfer Press supplied to an MNC producing car seats at their plant in China. Bolster Size 5500 mm x 2500 mm, equipped with 3 Axis Electronic Servo Transfer System & Destacker







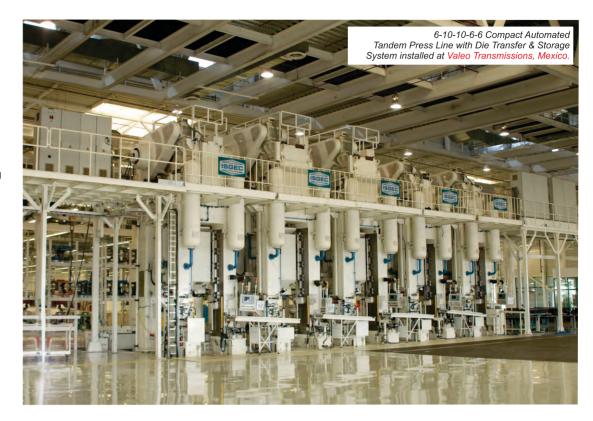
TANDEM PRESS LINES (MAT Series) 315T to 2000T

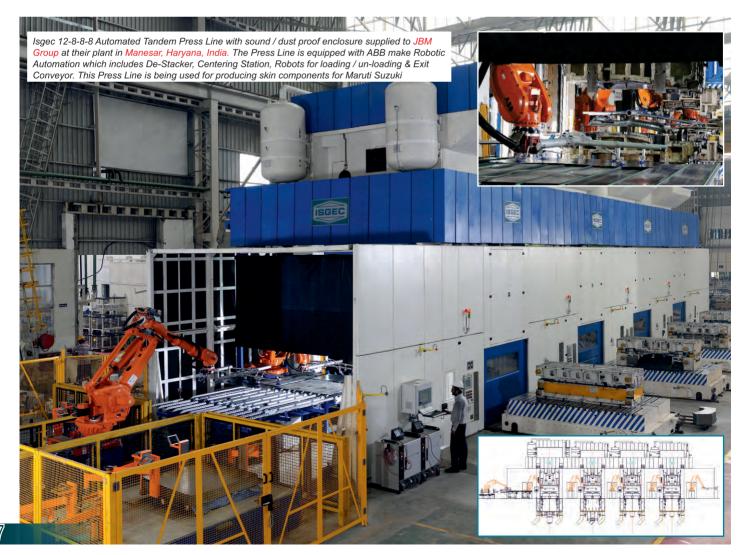


Isgec has so far supplied 90* Tandem Press Lines.

Most of these have:

- Link Drive Mechanism on Head Press.
- Variable Speed Drive to Maximize production.
- Compatibility for Inter-Press Automatic Transfer of Parts.
- Quick Die Change with Moving Bolsters, Auto Die Setting and Auto Die Clamps.





630 T Link Drive & 400 T Eccentric Gear Drive Tandem Line supplied to Japanese OEM in India for manufacturing of Two Wheeler Components





TRANSFER PRESSES (MATR Series) 630T to 3500T

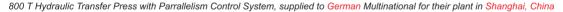




1000T & 1000T Transfer Press with Bolster Size of 5000 mm x 1500 mm integrated with Italian make Transfer System supplied to a Spanish Tier-1 manufacturer for their Plant in India



1500T Mechanical Transfer Press supplied to automobile seats manufacturer in USA for their plant in Mexico





PROGRESSIVE PRESSES (MAP Series) 315T to 1500T





The customer has entrusted Isgec with all orders for their requirements of Progressive Die Presses in the last11 years for their plants around the world. These include11 Presses for their plants in Buhl, Germany; Sorocaba, Brazil; Taicang, China; Port Elizabeth, South Africa and Hosur, India. The Presses shown in this picture are installed at their Plant in China

630 T Progressive Die Mechanical Press supplied to a plant in Poland. The press has a bed size of 3700 mm x 1600 mm, Slide Stroke 400 mm and speed of 22-44 spm. Identical presses supplied for their plants in Mexico and Brazil.

The customer has awarded an order for 2 no's 1500 T Transfer Mechanical Presses for Mexico & USA and 1200 T Progressive Die Mechanical Press for Brazil after satisfactory performance of 630 T Progressive Die Mechanical Presses.







SERVO PRESSES 110T to 3150T



110 T Ring Frame Servo Mechanical Press

630 T Servo Mechanical Press with Bolster Size 3400 mm x 1600 mm and 3-50 spm installed in Slovakia for Progressive Application







630T & 400T Servo Mechanical Press
with Bolster Size 2800 mm x 1100 mm and 3-60 spm
supplied to a Customer in Romania
supplied to a Customer in Hungary



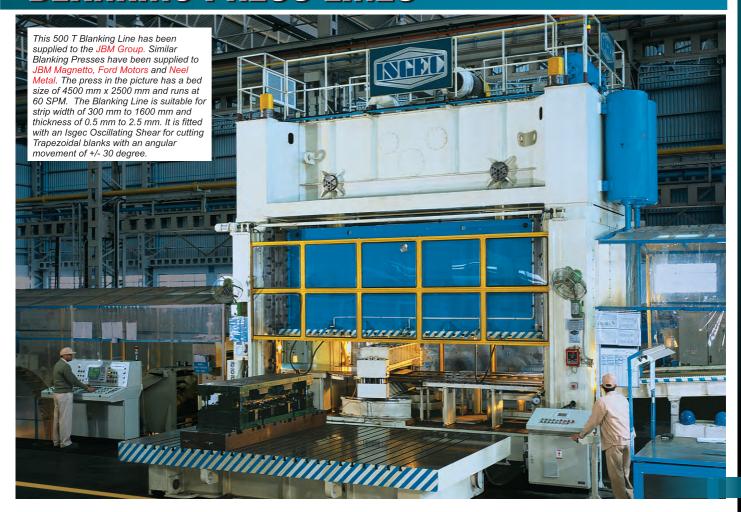
HIGH SPEED PRESSES (MHS Series) 63T to 400T



Isgec High speed presses are designed to deliver superior part quality with enhanced die life to suit various applications like Motor Laminations, Heat Exchanger Plates and Automotive Key Blanks etc. High Precision, Dynamic Balancing, Repeatability and Special Guiding systems are few of the key features. Isgec High Speed presses are available upto 600 spm.



BLANKING PRESS LINES



HYDRAULIC PRESSES up to 15000T



1200T Hydraulic Press was supplied in Germany for tryout and manufacturing critical components for Auto majors. The Press is equipped with moving bolster of size 4500 mm x 2200 mm and has provision for mounting Dampers, which makes it suitable for blanking.



315T Hydraulic Press supplied to a customer in Romania



1600T Hydraulic Press for manufacturing Cold Forged Automobile Transmission Components in India

1200T Hydraulic Hot Faming Press at Tier-1 automobile supplier in India

BGEC AND

BGE

Range of hydraulic presses supplied to a major Tier-1 automobile supplier in India for manufacturing wheels

1500T Hi-speed Hydraulic Press supplied to a German MNC in <mark>Brazil</mark> for manufacturing Clutch Components. Similar supplies made to their plants in South Africa & India







HYDRAULIC SPOTTING

PRESSES

300T Hydraulic Die Spotting Press supplied to Japanese Tier-1 automobile supplier at their plant in <mark>India</mark>



300 T Die Spotting Press built to JIS B 6403 Special Grade with Equalizing Beam, Micro-inching features & Blanking Shock Absorbers. We have supplied 35 similar Presses of capacities up to 400 T to major Tool Rooms and OEM's in India including Toyota, Toyotetsu, Ashok Leyland, Tata Motors, Maruti Suzuki Suzuki, Honda Motorcycles, Sermo-moulds, ThyssenKrupp Rasandik, & JBM Group



HYDRAULIC

HEMMING (CLINCHING)

PRESSES

Isgec has supplied Hemming Presses to Maruti Suzuki, Ford India & Honda Cars. The Presses in the picture, installed at Ford India, are equipped with Die Carts and a Die Parking System for fast & efficient changeover.





TRYOUT PRESSES

2000 T Mechanical Tryout Press with full force Micro Inching supplied to Tata Motors



1500T Mechanical Tryout Press Supplied to a Japanese MNC.

We have supplied such Presses upto capacity of 2000T



1200 T Tryout cum 300 T Die Spotting Press with 180 deg Slide Tilting feature supplied to Japanese Auto Tier-1 for their JV in India for Suzuki Project



1000 T Tryout cum 300 T Die Spotting Press supplied to Japanese Stamping Dies manufacturer in India



PRESSES for Special applications

COMPOSITES

2000 T Hydraulic Press for Composite Applications supplied to an OEM Group Company in India



REFRACTORIES



HEAT EXCHANGERS

7000 T and 2000 T Hydraulic Presses supplied to manufacture Heat Exchanger Plates for High Capacity Industrial Heat Exchangers

AEROSPACE

 $6500\ T\ Hydraulic\ Elast of orming\ Press\ supplied\ for\ Aerospace\ Application\ in\ India$







STANDARD MECHANICAL PRESSES 40T to 630T

Isgec offers a wide range of Standard Mechanical Press Machines ranging from 40T to 630T in Monolithic Frame, Ring Frame & Gap Frame constructions for Domestic & Export markets. These machines are primarily focused at Small & Medium scale Industries and are available at short delivery.



250 T MAX 1 Monolithic Frame Single Crank Press supplied to Auto Tier-2 in India. MAX 1 Models are available from 200 T to 400 T

Ring Frame Presses GR Series are available from 110 T to 400 T

CNC Hydraulic Press Brake 50 T to 800 T



Battery of Gap Frame Presses supplied to Automotive Tier1 Industry in India. Gap Frame Presses GZ/GL series are available from 40T to 400 T. Link Motion and Medium Speed options are also available





TECHNOLOGY

At Isgec, we have been continuously working on developing and updating ourselves Technologically. After acquiring Technology for Mechanical Presses from Rovetta Presse Spa of Italy (1985 to 1997) and Hydraulic Presses from John Shaw of UK (1967 to 1978), we have now experience of building over 5500 Presses, most of which have been supplied in the last 20 years.

Today Isgec has in-house design capability, expertise in Finite Element Analysis & 3-D Modeling and proven skills in the development of dedicated software for System Controls.

To refine our knowledge base, we obtained the help of world renowned premier research institutes including the Indian Institute of Technology (IIT) and consultancy from Aachen University of Technology, Germany.

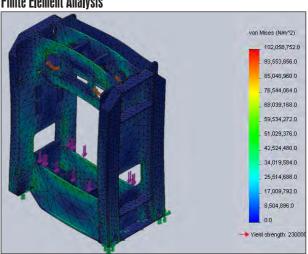
CNC Designs using Servo Motors and Servo Hydraulics are applied extensively on our Presses. Isgec has manufactured a large size 4500 T Hydraulic Press for manufacturing Long Chassis Members for commercial vehicles. This press is equipped with a tool turning device.

R & D Center

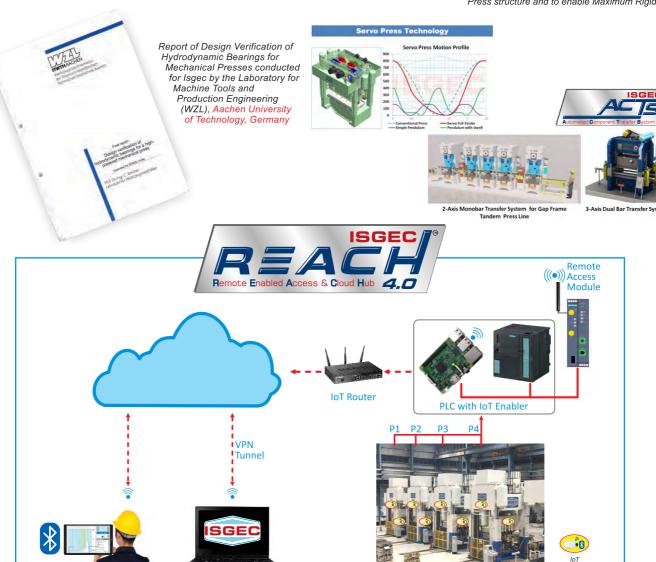


R & D Center at Yamunanagar (Govt. Registered)

Finite Element Analysis



Finite Element Analysis (FEA) adopted to verify fatigue life of Press structure and to enable Maximum Rigidity.



Shopfloor Customer

Global

Service Centre

QUALITY

Safety

C€ (EN 16092 : 2018) OSHA 1910.217 **CSA Z142** NR-12

Accuracy

Mechanical Presses : JIS B 6402 - Grade 1 : JIS B 6403 - Class 1 Hydraulic Presses Die Spotting Presses: JIS B 6403 - Special Class

Rigidity

Deflection of Bed / Slide under full load: 0.17 mm/m, 0.15 mm/m, 0.125 mm/m, 0.1 mm/m



Dedicated software has been developed by Isgec for Press System Controls. The user friendly software is used for instant diagnostics. This picture is of the Main Menu Touch Screen



CE Certificate

ISO Certificate for Quality Assurance from Lloyd's Register.





for Environment Management from DNV.

QUALITY COMPONENTS

Components

- Clutch & Brake Units
- Cam Limit Switches
- Electrical Drives
- Hydraulic Components
- Pneumatic Components
- PLC Controls
- Dual Solenoid Safety Valve ROSS, Herion

Makes Normally Used

Ortlinghaus, Goizper, Ompi, Herion Balluf, KAMCO

Siemens, Allen Bradley, Telemecanique, Mitsubishi

Bosch Rexroth, Parker, Vickers

Festo, SMC Pneumatics

Siemens, Allen Bradley, Wintress, Mitsubishi

Other Makes can also be used as specified by the customer

We can offer third party inspection by TUV, Lloyd, SG or any other inspecting agency

INFRASTRUCTURE





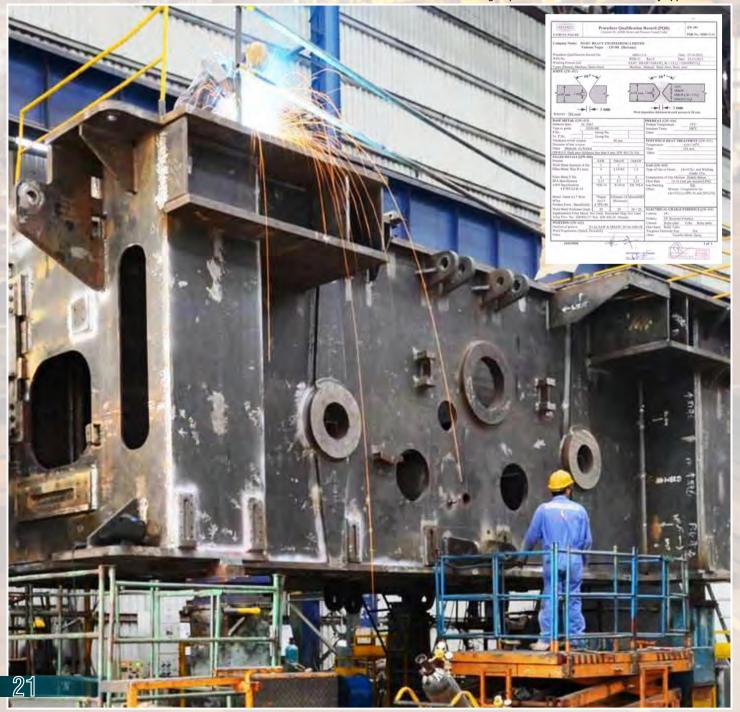


Crown Machining



Coordinate Measuring Machine

Crown Fabrication & Welding as per ASME Standards & Third Party approved WPS



MANUFACTURING CAPACITY: 20 Lines per year

Each Equivalent to G1 Line (2400 T Head Press)

Shop Area

Maximum Single Piece Handling Capacity

Maximum Pit Size

• Maximum Size of Stress Relieving Furnace

Maximum Size of Boring Machine

Large Floor Type Boring Machines

Qualified Engineers

• Maximum Capacity of Gear Hobbing Machine

: 30,000 sq. m. (323,000 sq. ft.)

: 300T Head Press

: 28 m x 10 m x 6 m

: 14.5 m x 4.6 m x 4 m

: 16 m x 4.5 m x 2.4 m

: 15 Nos.

: 180 Nos.

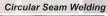
Diameter 2000 mm & module 20



Stress Relieving Furnace



Gleason Gear Hobbing Machine





One of the Customer Onsite Training Programs. Isgec provides many such Onsite & Offsite customer training programs



Mechanical Presses



- · Complete Press Reconditioning
- Health Check-up & AMC
- Restore Press Accuracy
- · Machining of Bolster and Slide plate
- · Reconditioning of Drive Components
- PLC System Upgrade
- · Retrofitting of Die Cushion System
- · Auto Die Change / Robotic interface
- Integration of Pick & Place Automation & Peripheral equipments with the Press

Hydraulic Presses

- · Complete Press Reconditioning
- Health Check-Up & AMC
- Restore Press Accuracy
- · Machining of Bolster and Slide plate
- · Reconditioning of Hydraulic system
- · Upgrade Hydraulic System with Servo Hydraulics
- · Retrofitting of Die Cushion System.
- · PLC System Upgrade
- · Die Cart System
- · Integration of Pick & Place Automation & Peripheral equipments with the Press



RANGE OF PRESSES

Presses for Sheet Metal Working:

MECHANICAL PRESSES:

- Servo Mechanical Presses
- Progressive Die Presses
- Tandem Line Presses
- Transfer Presses
- Blanking Press Lines
- · High Speed Presses
- Standard Gap Frame Presses (40T to 400T)
- Standard 'H' Frame Presses MAX1 & MAX2 Series (200T to 630T)

HYDRAULIC PRESSES:

- · Servo Hydraulic Presses
- · Single Action & Double Action Presses
- Die Spotting Presses
- Tryout Presses
- Hemming Presses
- Rubber Pad Forming Presses
- Standard Presses HSG Series
- Forging Presses

Presses for other Applications:

MECHANICAL PRESSES:

- Trimming Presses
- · Presses for Hot and Cold Forging

HYDRAULIC PRESSES:

- Coining & Calibration Presses
- Powder Compacting Presses
- · Moulding Presses Rubber & Brake Lining etc.
- SMC Composite Forming Presses
- Decorative Laminates & Plywood Presses
- Straightening Presses
- · Hot Forming Presses
- Wheel & Axle Assembly Presses
- Refractory Presses

Other Businesses -

Process Equipment • EPC Projects • Boilers • Sugar Plants & Distilleries • Castings • Contract Manufacturing







Sales Offices & Plants : Isgec Heavy Engineering Ltd.

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E-mail: smpbawal@isgec.com

Eagle Press & Equipment Co. Ltd.

Windsor (Ontario) Canada

: Ahmedabad • Bengaluru • Chennai • Gurgaon • Mumbai • Noida • Pune **Regional Offices**

Overseas Offices : Chonburi, Thailand • Ontario, Canada • Tennessee, USA

Corporate Office

: Isgec Heavy Engineering Ltd. A-4, Sector 24, Noida - 201 301, India Tel.: +91-120-408 50 01 / 02





Sales Representatives : Brazil • China • France • Germany • Hungary • Indonesia • Italy • Japan Malaysia • Mexico • Poland • Russia • South Africa • Spain • Thailand

Turkéy • USA • Vietnam