ITT Enidine’s customer service staff and technical sales personnel are available to assist you with all of your application needs.

Operating with lean manufacturing and cellular production, iTT Enidine produces higher quality custom and standard products with greater efficiency and within shorter lead times.

ITT Enidine’s comprehensive, website is full of application information, technical data and sizing examples that will assist you in selecting the product that’s right for you.

Our website also features a worldwide representative lookup to help facilitate fast, localized service. For application assistance call our technical helpline at 1.800.852.8508 ext.253.

ITT is a diversified leading manufacturer of highly engineered critical components and customized technology solutions for growing industrial end-markets in energy infrastructure, electronics, aerospace and transportation.

Building on its heritage of innovation, ITT partners with its customers to deliver enabling solutions to the key industries that underpin our modern way of life. Founded in 1920, ITT is headquartered in White Plains, NY with employees in more than fifteen countries and sales in more than 125 countries. The company generated pro forma 2010 revenues of approximately $2 billion. For more information, visit www.itt.com.

Global Presence

ITT Enidine engineers continue to monitor and influence trends in the motion control industry, allowing us to remain at the forefront of new energy absorption and vibration isolation product development.

Our experienced engineering team has designed custom solutions for a wide variety of challenging applications, including recoil buffer technologies and Counter I.E.D. Electronics isolation, among others.

These custom application solutions have proven to be critical to our customers’ success. Let our engineers do the same for you.
INTRODUCTION
JARRET devices are designed and built on the principle of the compression, and the shear characteristics, of specially formulated silicone compounds (JARRET patent). These characteristics enable the JARRET device to be designed as an energy storing device (a spring) or an energy dissipating device (a shock absorber) or a combination of both. By modifying the geometry of the units and selecting an appropriate silicone compound, emphasis can be placed either on the energy storing function or on the energy dissipating function.

Hysteresis
The actual hysteresis is between 5 and 10 percent and does not in practice negatively affect strip shape control or AGC.

Temperature
JARRET Springs use silicone compounds that retain their properties over a wide temperature range. However, since their coefficient of expansion is greater than that of steel, a variation in temperature causes a change in force level. All force values listed for any spring are rated at a temperature of +20°C.

- Allowable extremes: -40°C to +70°C
- Recommended limits: -20°C to +50°C

Applications
Hot strip mills, Cold strip mills, Skinpass mills, Tin mills, Tempering mills, Plate mills, Slab/Bloom mills, Barmills, Rod mills.

Advantages:
1. Extremely compact.
2. Dependable retention of initial characteristics, even after years of non-use.
3. Easy installation.
4. No maintenance.
5. No adjustment necessary in service.
6. Elimination of any additional devices for pre-loading because the silicone has been pre-stressed during initial charging.
7. Applicable service life: in normal operating conditions it may reach 5 to 10 years.

STROKE CALCULATION

Load per JARRET spring calculation:
Top work roll/chock assembly weight divided by total number of JARRET springs used (generally two per chock).

References (Mill manufacturers)

U.S.A.
SMS-DEMAG
DANA-BLISS
PATA-HURARY
MORGAN CONSTRUCTION
DANLU JARRET ENGINEERING
tipps, inc.

GERMANY
SWS
KOCH
SUNDWIG
SMS-DEMAG

CANADA
DORANCON ENGINEERING
WORKS

AUSTRIA
VOEST ALPINE

JAPAN
I.H.

FRANCE
VAL-CLEM

DATA REQUIRED TO SELECT A JARRET SPRING

U.S.A.
SMS-DEMAG
DANA-BLISS
PATA-HURARY
MORGAN CONSTRUCTION
DANLU JARRET ENGINEERING
TIPPS, INC.

GERMANY
SWS
KOCH
SUNDWIG
SMS-DEMAG

CANADA
DORANCON ENGINEERING
WORKS

AUSTRIA
VOEST ALPINE

JAPAN
I.H.

FRANCE
VAL-CLEM

S W S
K O C H
S U N D W I G
S M S - D E M A G


U.S.A.
SMS-DEMAG
DANA-BLISS
PATA-HURARY
MORGAN CONSTRUCTION
DANLU JARRET ENGINEERING
TIPPS, INC.

GERMANY
SWS
KOCH
SUNDWIG
SMS-DEMAG

CANADA
DORANCON ENGINEERING
WORKS

AUSTRIA
VOEST ALPINE

JAPAN
I.H.

FRANCE
VAL-CLEM

S W S
K O C H
S U N D W I G
S M S - D E M A G


U.S.A.
SMS-DEMAG
DANA-BLISS
PATA-HURARY
MORGAN CONSTRUCTION
DANLU JARRET ENGINEERING
TIPPS, INC.

GERMANY
SWS
KOCH
SUNDWIG
SMS-DEMAG

CANADA
DORANCON ENGINEERING
WORKS

AUSTRIA
VOEST ALPINE

JAPAN
I.H.

FRANCE
VAL-CLEM

S W S
K O C H
S U N D W I G
S M S - D E M A G


U.S.A.
SMS-DEMAG
DANA-BLISS
PATA-HURARY
MORGAN CONSTRUCTION
DANLU JARRET ENGINEERING
TIPPS, INC.

GERMANY
SWS
KOCH
SUNDWIG
SMS-DEMAG

CANADA
DORANCON ENGINEERING
WORKS

AUSTRIA
VOEST ALPINE

JAPAN
I.H.

FRANCE
VAL-CLEM

S W S
K O C H
S U N D W I G
S M S - D E M A G


U.S.A.
SMS-DEMAG
DANA-BLISS
PATA-HURARY
MORGAN CONSTRUCTION
DANLU JARRET ENGINEERING
TIPPS, INC.

GERMANY
SWS
KOCH
SUNDWIG
SMS-DEMAG

CANADA
DORANCON ENGINEERING
WORKS

AUSTRIA
VOEST ALPINE

JAPAN
I.H.

FRANCE
VAL-CLEM

S W S
K O C H
S U N D W I G
S M S - D E M A G