Excellence in Timber Engineering

TIMBER CONNECTIONS

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Introduction

Gang-Nail Connector and Corner Plates are used in a wide variety of applications and by an even broader range of manufacturing and industrial end-users. In fact, wherever timber fixing or jointing for strength and longevity is required.

This brochure concentrates on a few aspects only and we would be pleased to consider and investigate new ideas and suggestions. We suggest therefore that the examples provided be viewed as a starting point to any company interested in improving or extending its product range.

The range of applications for Gang-Nail Connector and Corner Plates highlighted in this publication include:-

- **Frames**
  - Pressure/Security Frames.
  - U-Frames or Pipe Racks.

- **Cases and Crates**
  - Open or Closed. Construction and/or repair.

- **Pallets**
  - Repair, Reinforcement and Anti-Split.
  - Tandem Pallets.

- **Fencing Applications**
  - Fixing and Anti-Split.

- **Storage Racking**
  - Protection against damage.

- **Pipe and Cable Guards**

- **Spacers for Machinery Transportation**

Low cost machinery for the fast, efficient, production of timber products using Gang-Nail Connectors is available on a standard design or bespoke basis. By way of example this brochure contains details of our standard framemaker machinery.

We will in all instances endeavour to tailor our approach to meet your company’s specific needs.

For more information, please contact:-

**Paul Baron on 01252 334691**
Gang-Nail Connector Plates

Gang-Nail Connectors are punched metal nailplates manufactured from 20 gauge galvanised mild steel. They can be used to produce rigid, distortion free joints of a strength greater than any other form of timber jointing. This strength, plus the greater resistance to rust given by the use of galvanised steel, ensures a greater life-cycle.

Gang-Nail Connectors are also produced from stainless steel—for more aggressive environments—and in heavier duty 14 gauge steel for applications requiring greater robustness or resistance to impact.

Gang-Nail Connector Plates are available in a wide range of sizes. Full details available on application.

The smaller places can be applied with a claw hammer but larger plates will need mechanical location. Specifications and quotations for the supply of machinery can be provided.
Gang-Nail Corner Plates

Gang-Nail Corner Plates are punched metal fasteners manufactured from 20 gauge galvanised mild steel, ensuring a high resistance to rust. They are easily applied by hand, being driven in and bent by an ordinary claw hammer.

They offer a number of advantages:-

- strong and rigid joints
- increased life cycle
- protection against damage
- easy means of salvaging damaged boxes.

Gang-Nail Corner Plates are available in two sizes:-

- 28 x 152mm 400/Box
- 58 x 152mm 200/Box
Pressure/Security Frames

Pressure or security frames provide an excellent means for the stable, secure transportation or storage of a wide range of easily crushed or fragile goods. These include cans, bottles and sheet products of either metal, paper or glass. Two standard types are shown.

Gang-Nail frames are butt-jointed, with maximum holding power ensured by the design of the plate. Used in conjunction with strapping, a constant and even pressure is distributed around the frame to form a tight, rigid pack that can withstand the roughest of handling.
Top Frames

2 No. 50 x 99 Gang-Nail Plates pressed into one side of the frame only to prevent damage of the product.

Pipe Racks

12 No. 50 x 99 Gang-Nail Plates pressed into one side of the frame only to prevent damage of the product.
Crates & Cases

Crate and case construction can be improved by the introduction of plating at joints, internal and/or external bracing and by the use of Gang-Nail Corner Plates to give greater reinforcement and strength where damage is most likely.

To greater efficiency in manufacture is added the superior strength properties of Gang-Nail jointing, splicing or edge protection. Cases or crates can be designed to carry significant loads whatever the product type, including machinery, components, sheet or bar metal and artifacts.

Open Crating for sheet products

External Bracing
Box Crating

Pallets

Tandem pallet construction. Where transported goods do not conform to standard pallet sizes, Gang-Nail Corner plates may be used to join pallets in tandem. If required, these may be subsequently disassembled so that the pallets may be recycled for general use.
Fencing

For jointing of arris rails and to prevent posts splitting.

Joining posts to rails.

Storage Racking

Protection for the ends of boards against damage by forklifts or steel stillages.
Pipe and Cable Guard

The use of Gang-Nail Corner Plates to protect pipes or wires concealed by wall, ceiling or floor boards against damage during cladding or subsequent fixing or construction work.

Spacers

Simple timber fabrication to assist safe and stable transportation of machinery.
Gang-Nail’s Mechanical Engineering Department provides the expertise for the construction of machinery to customer specification, as single or multiple head units. A typical example is the Framemaker.

**Gang-Nail Framemaker**

The GANG-NAIL FRAMEMAKER can be used to produce rectangular or H style pressure frames. In conjunction with strapping, these pressure frames provide the means for safe, stable transportation and are widely used by the canning, glassware and papermaking industries.

U-Frames or pipe racks can be produced on the FRAMEMAKER. These are used to restrain tubular products during transport and on-site.

The FRAMEMAKER is easy to use, single or two-man operation according to user requirements, with improvements to production efficiency and increased capacity inevitably leading to reduced costs.
### Specification*

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td><strong>Power Requirements</strong></td>
<td>Electricity 10 amps, 415 volts. 50 Hz cycles, 3 phase.</td>
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<tr>
<td><strong>Machine Footprint</strong></td>
<td>1.5m width, 2.7m length.</td>
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<tr>
<td><strong>Pressing Capacity</strong></td>
<td>4.8 tonne per head capable of pressing up to 1.6dm³ Gang-Nail connectors.</td>
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<tr>
<td><strong>Pressing Cycle</strong></td>
<td>5 seconds.</td>
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<tr>
<td><strong>Safety Feature</strong></td>
<td>Two button press control.</td>
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<tr>
<td><strong>Timber</strong></td>
<td>Softwood variety at minimum 20% moisture content.</td>
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* Refers to standard design only.