



## **Request for expressions of interest from property owners**

LMETB invites owners of suitable premises in Louth or Meath to submit expressions of interest to rent premises to it for use as a training and demonstration facility for 3D construction printing and for storage purposes.

Please see required and desirable features of the premises below.

Responses including plans, pictures, the address and availability of the premises and how it fits the features below should be sent to [education@lmetb.ie](mailto:education@lmetb.ie) on or before noon on Friday, 13<sup>th</sup> October.

Overall	Details
Internal	<p>Size</p> <ul style="list-style-type: none"> <li>• c 400m<sup>2</sup> required.</li> <li>• Minimum clear height of 5.2m required for the installation and operation of the printing equipment</li> <li>• The equipment is normally bolted to the floor via chemical anchor and would require a reinforced concrete floor with a minimum slab depth of 200mm</li> </ul> <p>Facilities</p> <ul style="list-style-type: none"> <li>• Equipment and operations</li> <li>• Training</li> <li>• Office</li> <li>• Storage</li> <li>• Ancillary space including bathroom, kitchen and canteen</li> </ul>
External	<p>Area</p> <ul style="list-style-type: none"> <li>• c 350m<sup>2</sup> required.</li> <li>• In addition a minimum of fifteen dedicated car parking spaces should be available directly adjacent to the facility or in the direct vicinity</li> </ul> <p>Facilities</p> <ul style="list-style-type: none"> <li>• External plant</li> <li>• Silos</li> <li>• Materials storage</li> <li>• Loading</li> </ul>

<p>Statutory permissions</p>	<p>Zone</p> <ul style="list-style-type: none"> <li>• The facility would ideally be located in a planning zone which permits high end technology/manufacturing and major campus style office based employment</li> </ul> <p>Premises</p> <ul style="list-style-type: none"> <li>• Ideally the premises has a prior established use consistent with the above and training has previously been undertaken at the location</li> <li>• Ideally the premises should have fire certificate and DAC consistent with the above</li> </ul>
<p>Location</p>	<p>The premises would ideally be located on the periphery of a major town with good transport links</p>
<p>Accessibility</p>	<p>The premises should ideally meet Universal Design Guidelines</p>

3D Construction Printer	Requirements
<p>1. To accommodate a BOD2 3-2-2 3D construction printer fitted with advanced hose management system</p>	<p>Area</p> <ul style="list-style-type: none"> <li>• Print area of 32 m<sup>2</sup> required. (X=7.2m, Y=4.6m, Z (height)=3m)</li> <li>• Installation area required. (X=13.5m, Y=9.05m, Z (height)=5.2m)</li> </ul> <p>Power</p> <ul style="list-style-type: none"> <li>• Power Requirements (32A 3-phase 400 V)</li> </ul> <p>Facility/Storage</p> <ul style="list-style-type: none"> <li>• Chemical Storage Requirements</li> <li>• Tool storage (3m x 4m)</li> <li>• General curing and component storage (5 m x 10 m)</li> </ul>

Ancillary Equipment	Requirements
<b>Concrete System</b>	
<ol style="list-style-type: none"> <li>1. To accommodate a COBOD concrete mini batch / mixing plant</li> <li>2. To accommodate a 3 m3 cement silo</li> <li>3. To accommodate a COBOD concrete Piston Pump 2022 Model</li> </ol>	<p>Area</p> <ul style="list-style-type: none"> <li>• Plant footprint of 43 m<sup>2</sup> (5.22 m x 8.25m)</li> <li>• Loading access (3m x 8m minimum)</li> </ul> <p>Power</p> <ul style="list-style-type: none"> <li>• Mixer Power Requirements (32A 3-phase 400 V)</li> <li>• Pump Power Requirements (63A 3-phase 400V)</li> </ul> <p>Water</p> <ul style="list-style-type: none"> <li>• Mixer Water Requirements (3-5 bar water supply)</li> </ul> <p>Facility/Storage</p> <ul style="list-style-type: none"> <li>• Material Storage (5m x 5m – sand) (5m x 5m – aggregates) (3m x 1m – cement *weather proof)</li> </ul>
<b>Mortar System</b>	
<ol style="list-style-type: none"> <li>1. To accommodate a 19 tonne dry mortar silo</li> <li>2. To accommodate a MAI Specialist Concrete Printing Mortar Pump</li> </ol>	<p>Area</p> <ul style="list-style-type: none"> <li>• Plant footprint of 25 m<sup>2</sup> (5 m x 5 m x 5 m)</li> </ul> <p>Power</p> <ul style="list-style-type: none"> <li>• Mortar Silo Power Requirements (32A 3-phase 400 V)</li> <li>• Mortar pump Power Requirements (32A 3-phase 400 V)</li> </ul> <p>Water</p>

	<ul style="list-style-type: none"> <li>• Mortar pump Water Requirements (2-3 bar water supply)</li> </ul>
<b>Material Handling</b>	<b>Requirements</b>
<ol style="list-style-type: none"> <li>1. To accommodate a Manitou MT733 Easy Telescopic loader + GP Bucket</li> </ol>	<p>Area</p> <ul style="list-style-type: none"> <li>• Plant storage area (3m x 3m)</li> </ul>

Training Area	Requirements
<ol style="list-style-type: none"> <li>1. Equipment Training / Observation area</li> <li>2. General Training Support facilities</li> <li>3. Practical Training Area</li> <li>4. General Welfare</li> </ol>	<p>Equipment Training/Observation Area Facilities</p> <ul style="list-style-type: none"> <li>• Minimum 50 m<sup>2</sup> Training area adjacent to 3DCP printer to accommodate up to 12 no. Attendees</li> </ul> <p>General Training Support Facilities</p> <ul style="list-style-type: none"> <li>• Centrally located AV equipment in Equipment Training Area to display curriculum content and to compliment live demonstrations</li> <li>• Level Access to all learning areas</li> </ul> <p>Practical Training Area Facilities</p> <ul style="list-style-type: none"> <li>• Designated Signing in and Induction Area</li> <li>• PPE storage and changing area</li> <li>• First Aid box</li> </ul> <p>Classroom learning</p> <ul style="list-style-type: none"> <li>• Minimum capacity for 15 no. People (including trainers)</li> <li>• AV display with appropriate power outlets</li> <li>• Conferencing equipment to facilitate remote training (from prospective specialist / guest trainers)</li> </ul> <p>General Welfare Facilities</p> <ul style="list-style-type: none"> <li>• Min 1 no. Unisex Accessible Toilet and Washbasin</li> </ul>

	<ul style="list-style-type: none"> <li>• Min 1 no. Unisex Shower and a Changing Area</li> <li>• Kitchen area with Dishwasher and instant Hot Water</li> <li>• Canteen area adjacent to kitchen area with minimum seating capacity for 15 People (15 sqm)</li> </ul>
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Facility Security and Detection	Requirements
1. Security System  2. Fire detection system	Security System <ul style="list-style-type: none"> <li>• Monitored Security system</li> <li>• Video Security Surveillance system with 30 day recording playback capacity</li> </ul> Fire Detection <ul style="list-style-type: none"> <li>• L2 Addressable Fire Detection system</li> </ul>

Storage	
	<ul style="list-style-type: none"> <li>• Storage space additional to that required for the above would be desirable</li> </ul>