전공 영어 활용 보고서

제출일 2022년 12월 7일

A. 별첨된 전공영어 단어(1회 – 10회)를 5회씩 자필로 작성하여 제출 하시오.

B. 다음에 주어진 문장을 해석하시오.

1.

The Lynx 2100 Series – the next generation of the Lynx Series, currently with more than 25000 sales worldwide – aims to deliver even greater customer satisfaction with its superior machining performance, reliability, and user convenience.

2.

Superior Machining Performance

Equipped with a 15 kW (20.1 Hp) high-power motor and machine structure, and further enhanced spindle and axis ball screw stiffness, the Lynx 2100 Series offers excellent cutting capability up to a maximum turning diameter of Ø350 mm (Ø13.8 inch) and a maximum turning length of 550 mm (21.7 inch).

3.

High Reliability

The Series' excellent reliability is based on the adoption of a wider support structure, more stable bed, low vibration/noise spindle, servo-driven turret, and a full slideway cover for preventing coolant leaks and chips from penetrating the machine.

4.

Improved User Convenience

The CNC tailstock, new Easy Operation Package (EOP) and hot keys enable the user to operate peripheral devices quickly and conveniently. User convenience has been further enhanced with grease type lubrication and a lateral / rear side double-purpose chip conveyor.

5.

The sub-spindle function enables rear-side cutting by a single setup, thereby maximizing the user's productivity and efficiency. Full C axis 0.001 degree control is included to optimize capability.

6.

Rotation of the turret is controlled by servo motor for rapid and accurate selection of tools. The M model is fitted with Doosan's unique BMT45P turret to provide superior performance for milling operations.

7.

Adoption of the hydraulic actuation type CNC tailstock (hydraulic type) enables tailstock positioning and work setting using the operation panel. The dedicated screen reduces the work setting time by about 50%.

8.

Building on the history of the well proven and successful DNM and DNM II series, the new version DNM series boasts even greater reliability and performance. In addition, the new series includes grease lubrication to the roller guideways for more environmental-friendliness. The design concepts of the DNM 4500/5700/6700 series are high speed, high rigidity and suitability for universal applications. Standard features are the largest machining space in its class, direct coupled spindle, roller guideways and thermal error compensation to provide optimum precision.

전공 영어 활용 1회차

1. Mechanical Engineering : 기계공학
2. body : 물체
3. load : 외력, 하중, 부하 < static load (정하중), dynamic load (동하중)

4. transformation : 변형(화학적)
   ↳deformation : 변형(물리적) - elastic deformation(탄성변형)
5. area : 면적
6. dimension : 단위(차원) , 치수
7. stress : 응력
8. elasticity : 탄성
9. limit : 한계
10. plasticity working : 소성가공
11. material : 재료
12. tension : 인장(tension load)
13. compression: 압축
14. force : 힘
15. section : 단면 (section area : 단면적)
16. tension - compression fatigue limit : 인장-압축 피로한도
17. propotional limit : 비례한도
18. test piece : 시험편(testing machine : 시험기)
19. elastic limit : 탄성한도
20. yield point : 항복점

전공영어 활용(2회차)

1. 기계공작법 : mechanical technology of manufacturing process and materials

2. 주조 : casting 3. 열처리 : heat treatment

4. 용접 : welding

5. 측정 : measurement - measurement instruments(측정기기)
6. 절삭가공 : cutting, machining 7. 연삭가공 : grinding
8. CNC : computer numerical control
9. CAD : computer aided design
10. 가공물 : processing materials(piece) 11. 경도 : hardness
12. 절삭공구 : cutting tool 13. 칩 : chip
14. 공작기계 : machining tool 15. 정밀도 : precision
16. 자동제어 : automatic control 17. 제도 : drafting, drawing
18. 절삭날 : cutting edge 19. 전단력 : shearing force
20. 절삭저항 : cutting force

전공 영어 활용(3회차)

1. 유동형 칩 : flow type chip 2. 전단형 칩 : shear type chip
3. 균열형 칩 : crack type chip
4. 구성인성 : built-up edge 5. 연질 : softness
6. 점성 : viscosity 7. 점성 유체 : viscous fluid
8. 취성 : brittleness (fragility) 9. 파단면 : fraction
10. 유동 : flow 11. 가공경화 : working hardening
12. 가공여유 : machining allowance
13. 가공한도 : working limit
14. 진동 : vibration (진동계 : vibrometer)
15. 가공표면 : workingsurface
16. 절삭저항 : cutting resistance 17. 이송 : feed
18. 이송변속장치 : feed chance gear box (이송장치: feed gear)
19. 급수관 : feed pipe (service pipe)
20. 1분당 회전수 : RPM(revolution per minute)
    회전기계 : rotary machine

전공영어 활용 4회차

1.피가공물 : work piece 2. 정밀도 : accuracy (precision)
3.생산성 : productivity 4. 공정 : production study(process)
5. 부품 : parts (parts list)
6. 백만분의 일 : parts per million (ppm)
7. 봉 : bar 8. 절삭유 : cutting oil (cutting fluid)
9. 선반 : lathe 10. 왕복대 : carrige
11. 심압대 : tail stock 12. 공구이송대 : slide rest
13. 주축대 : head stock 14. 공구대 : tool post
15. 척 : chuck 16. 외경절삭 : turning
17. 정면절삭 : facing 18. 내경 : caliber (internal diameter)
19. 나사 : screw thread 20. 이송기구 : feed mechanism

전공영어 활용

5회차

1. 전단각 : shear angle 2. 전단바 : ratio of cutting
3. 전단변형 : shearing deformation
4. 공구수명 : tool life 5. 탄소공구강 : carbon tool steel
6. 합금공구강 : alloy tool steel
7. 고급주철 : high grade cast iron
8. 고속도강 : high speed steel 9. 피복공구강 : coated tool
10. 내경절삭 : boring 11. 테이퍼 절삭 : taper turing
12. 무단변속기 : non - step variable speed gear
13. 주축 : spindle 14. 중실축 : solid shaft
15. 중공축 : hollow shaft 16. 평행, 병열 : parallel
17. 안내면 따라 이동하는 장치 : saddle
18. 길이 이송 : longitudinal feed (- traversing)
19. 피치 : pitch 20.탁상선반 : bench type lathe

전공영어 활용

6회차

1. 단동척 : independent chuck 2. 연동척 : universal chuck.
3. 유압척 : hydraulic chuck 4. 원주면 : cylindrical surface
5. 원주율 : the ratio of the circumference
6. 회전바퀴 : pulley 7. 축이음 : coupling
8. 구동장치 : driving gear 9. 구조물 : structure
10. 편심 : eccentric 11. 경질고무 : ebonite
12. 공구각 : basic tool angle 13. 여유각 : relief angle
14. 앞날각 : end cutting edge angle
15. 회전 센터 : live center 16. 정지센터 : dead center
17. 조정(절) 나사 : adjusting screw
18. 외경 : external diameter 19. 널링 : knurling
20. 모형판 : template

전공영어 활용

7회차

1. 모방가공 : copying 2. 윤곽선삭 : contour turning
3. 제어신호 : control signal 4. 출력 : power
5. 제어밸브 : pilot valve 6. 테이퍼 장치 : taper attachment
7. 변환기어 : change gear 8. 잇수비 : gear ratio
9. 교번하중 : alternate load
10. 구면 롤러 베어링 : spherical roller bearing
11. 구면운동 : spherical motion 12. 궤적 : locus
13. 백분율 ; percentage
14. 대량생산 : mass production method
15. 공장자동화 : factory automation (FA)
16. 공정도 : process drawing 17. 가로변형 : lateral strain
18. 모따기 : chamfering 19. 구동축 : driving shaft
20. 구름마찰 : rolling friction

전공영어 활용

8회차

1. 가공여유 : machining allowance
2. 가로이송나사 : crossfeed screw 3. 강판 : steel plate
4. 강화유리 : strengthened glass 5. 기호 : sign
6. 기둥 : post 7. 내면연삭 : internal grinding
8. 내연기관 : internal combustion engine
9. 냉각 장치 ; cooling system 10. 냉간가공 : cold working
11. 노즐 : nozzle 12. 밀링머신 : milling machine
13. 바닥난방 : floor heating 14. 바닥면적 : floor space
15. 반경 : radius 16. 반도체 : semiconductor
17. 반사각 : angle of reflection
18. 사다리꼴 : trapezoid 19. 사용압력 : working pressure
20. 유효길이 : useful length

전공영어 활용

9회차

1. 작업대 : work bench 2. 가공성 : workability
3. 가공품 : finished goods 4. 정밀도 : accuracy
5. 기둥 : column 6. 오버암 : overarm
7. 수직밀링머신 : vertical milling machine
8. 평 밀링커터 : plain milling cutter
9. 측면 밀링커터 : side milling cutter
10. 총형 밀링커터 : formed milling cutter
11. 톱날형 커터 : slitting saw
12. 엔드 밀링 커터 : end milling cutter
13. 회전테이블 : circular milling attachment
14. 윤활유 : lubricating oil 15. 자루 : shank
16. 절삭분 : shavings
17. 상향절삭 : up cut milling (work feeding against rotation of cutter)
18. 하향절삭 : down cut milling (work feeding with rotation of cutter)
19. 떨림 : chattering 20. 공전 : idle

전공영어 활용

10회

1. 파손 ; failure 2. 공구경로 : tool path
3. 절삭저항 : cutting force (resistance)
4. 회전력 : torque 5. 구동기구 : drive mechanism
6. 기계요소 : elements 7. 측정기기 : measuring instrument
8. 불합격 : reject 9. 합격 : accept (success)
10. 형상기억합금 : shape - memory alloy
11. 치수공차 : dimensional tolerance 12. 오차 : error
13. 원가절감 : cost reduction
14. 사용강도 : working strength
15. 작동시간 : periods of operation
16. 칩 브레이커 : chip - breaker 17. 박판 : thin laminate
18. 수입검사 : in - coming inspection
19. 출하검사 : out - going inspection
20. 원료(소재) : raw material